
**HISTORY OF
KANSAS STATE COLLEGE
OF AGRICULTURE AND
APPLIED SCIENCE**



JUSTIN S. MORRILL

Author of the Morrill Act approved July 2, 1862, which provided grants of land for the endowment of colleges to be organized for the education of the industrial classes. He also sponsored a Second Morrill Act, approved August 30, 1890, which authorized annual appropriations of \$25,000 to each of the land-grant colleges and universities.

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KANSAS STATE COLLEGE
OF AGRICULTURE AND
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By
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Kansas State College Historian

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TO members of Governing Boards who have held their appointments as civic trusts, and as mandates to promote education in the State of Kansas;

To members of the Faculty, who by conscious design, or by unconscious result, through intelligence, scholarship, industry, and integrity, have created the standards of instruction and research;

To the Students and Graduates, whose earnestness of purpose, scientific and practical attainments, occupational success, and private and public service have created good will in the State; and

To all whose lofty ideals, breadth of vision, faith in the future, firmness of purpose, and tenacity in performance have made
KANSAS STATE COLLEGE,

This volume is humbly, gratefully, and sincerely
DEDICATED.

THE AUTHOR

DOCTOR Julius Terrass Willard, the author of this history, has been connected with Kansas State College throughout the life of the institution except for the first sixteen years. He was born April 9, 1862, about ten months before the College was founded. His birth place is only fifteen miles from the campus. The author and the College literally have grown up together. He entered the College as a student in 1879 and was graduated bachelor of science in 1883. Following his experience as an undergraduate he has been connected officially with the College for fifty-six years.

His experience in the College has included the status of undergraduate, graduate student, assistant, assistant professor, associate professor, professor, director of the Agricultural Experiment Station, dean, vice-president, acting president and historian. In each of the various positions he has discharged his duties with marked distinction. For almost six decades he has stood loyally by the College in prosperity and in adversity. Because of his long service, his wisdom, his integrity and his devotion to high standards of scientific research and of scholarship, the value of his contributions to the College and through it to the State and the Nation is incalculable.

No other person has known the College intimately so long as has Doctor Willard. With his extraordinary knowledge of the institution he combines a strong historical instinct, high literary ability and a veritable passion for accuracy. No other person could possibly be so well qualified to write a history of the oldest state college in Kansas, to which he has devoted a long and useful life.

F. D. FARRELL, President.

January, 1940.

PREFACE

IN choosing material for inclusion in this volume the author has been impressed by the enormous mass of that which has been omitted, and recognizes that he may meet criticism in respect to selections made. As the attempt has been to sketch the development of the College, much interesting matter not related to that process has been crowded out.

Writing from within the group, with accompanying prejudices, with inequalities in personal knowledge of the departments of the College, and with incomplete acquaintance with the constantly increasing personnel, the author has necessarily not completely attained the high standards of objectivity, fairness to individuals, and adequacy of presentation of institutional progress that have been his aim.

Great care has been used to exclude errors as to dates, and to attain factual accuracy in respect to historical incidents. A few statements in the book are at variance with some previously published. The courtesy of careful reference to records in such cases is solicited.

It has seemed unwise to include source reference data in respect to the thousands of individual items of the history. A large part of the recent work of the author has consisted in the preparation of index cards by means of which any interested person may conveniently find references to the records upon which most of the statements are based.

In assembling the data necessary the author has searched: (1) compilations of Federal laws affecting the land-grant colleges; (2) all the session laws of the State of Kansas; (3) all the minutes of the Boards of Regents, or of Administration, insofar as the latter touch Kansas State College; (4) all the minutes of the general faculty of the College; (5) all the minutes extant of the Council of Deans; (6) all the annual reports and biennial reports of the College; (7) all the College catalogues; (8) a complete file of the *Industrialist*; (9) publications of the Agricultural Experiment Station and the Engineering Experiment Station; (10) a complete file of Royal Purple and its fore-runners; (11) the *Students' Herald* and *Kansas State Collegian*; (12) the annual and the biennial reports of the State Board of Agriculture; (13) many volumes of the newspapers of Manhattan, Junction City, and Topeka; (14) "History of Kansas State Agricultural College," by Professor J. D.

Walters; "Kansas," edited by Professor F. W. Blackmar; "Kansas and Kansans," by W. E. Connelley; and (15) many other publications. Miss Harriet A. Parkerson most courteously gave the author access to the minutes of the Manhattan Town Company, the records of the trustees of Bluemont Central College, and to certain interesting personal manuscripts; and for these favors he records here his most cordial thanks.

It is impossible to acknowledge, or even to recall, all the generous acts of assistance given by colleagues in the institution, and by other individuals. The important service, and unfailing courtesy of officers of the Library of the Kansas State Historical Society must not be overlooked.

The author gratefully acknowledges the expert service of Professor J. O. Faulkner of the department of English, Kansas State College, who read nearly the entire book in manuscript, and whose professional advice has been of the greatest value.

In carrying the volume through the press the advice and service of Professor E. T. Keith and Professor E. M. Amos, and the technical skill and professional ability of other members of the printing staff have contributed greatly to the creation of this product of the art of printing.

J. T. WILLARD.

Kansas State College
January, 1940.

CHAPTER I

ORIENTATION

ONE cannot understand the development of anything without a knowledge of the initial condition. Even the older of the people now living have more or less difficulty in realizing the tremendous change which has taken place in material conditions during the last seventy-five years. To those of college age, an understanding of those conditions can be obtained only by a real effort. The physical progress of civilization may, without exaggeration, be asserted to have been greater during that period than it was during the thousand years immediately preceding.

SOME INDUSTRIAL CONDITIONS IN 1862

On July 2, 1862, when the land-grant act was signed, the Old World and the New had not been connected by the submarine cable telegraph, the east coast and the west coast of the United States had not been connected by a railroad. A terrific elemental struggle between the North and the South was in the midst of its progress. The settlement of the great region west of the Mississippi had hardly begun, and improved agricultural machinery had only recently received the attention of inventors. Three years before, Colonel E. L. Drake had obtained natural crude petroleum by drilling a well near Titusville, Pennsylvania, but its utilization as an illuminant had not displaced tallow candles, whale oil lamps, and pine knots. Six years before, Perkin had made the first synthetic dye, and it was still to be many years before artificial colors would displace natural dyes. Faraday had discovered the effect of a magnet on an electric current, and the vivid light accompanying some electric discharges was well known, but a practical electric motor and a usable electric light were still many years ahead. Cheap and abundant steel was nonexistent. The Bessemer process did not begin to come into use until 1856. The electric telegraph was in use, but telephones had not been thought of, and wireless telegraphy and radio telephony were about half a century away. The typewriting machine had scarcely been invented and was used very little within fifteen years. Commercial adding machines and other mechanical accounting devices were unknown. The linotype and other mechanical type-producing or type-setting devices did not come into much use for a quarter-century. Dry photographic plates and flexible film, without which modern pho-

tography and motion pictures are impossible, were unknown. The phonograph, making possible the permanent recording and reproduction of sound, was still to be devised. The automobile remained an impossibility until the internal combustion engine and supplies of volatile fuel from petroleum were available. Many things which existed were in only crude forms. The X-rays had been produced for some years in physical laboratories, but were discovered by Roentgen in 1895. He thus gave an indispensable instrumentality to medicine, industry and research.

SCIENCE AND COLLEGE DEVELOPMENT

The development of land-grant colleges has been parallel to the development of modern science, invention, and mechanical construction. The profession of engineering, as we now know it, had no existence in 1862. Architecture, and building of roads, canals, railroads, and bridges, constituted the engineering field. Mechanical facilities for the home and the farm were very simple. The field of knowledge in chemistry and physics was incomparably more limited than it is at present. On these accounts, the point of view in respect to the scope and function of land-grant colleges has necessarily undergone continuous change and development parallel to the advancement of science and industry. Any judgment concerning the proper work of a land-grant college must take this into account.

KANSAS CONDITIONS

Superimposed upon the general conditions affecting land-grant colleges, were the special conditions obtaining in this state in 1862. Serious movements toward the settling of the State of Kansas had been in progress only seven or eight years. Means of transportation were most primitive and the production of crops for market was very limited. Income available from taxation to support public institutions was correspondingly very low. The land-grant colleges had been allowed liberal grants of public land for their endowment, but, in the case of Kansas, at least, this land had not been sold, and while the endowment fund which was ultimately available seemed, in those times, munificent, immediately available funds were very meager. No fair judgment can be passed upon the policy and practice of those who first controlled the College, without complete and frank recognition of this condition. They were establishing a college on the very frontier of human settlements. A railroad did not reach Manhattan until 1866, three years after the opening of the College, and wagon roads were merely tracks over

the prairie. Bridges were few and very poor, and the larger streams were crossed by ferrying or, in exceptional conditions, by fording.

THE SITE OF MANHATTAN AND THE COLLEGE

The beauty of primitive Kansas was a frequent theme with the early writers. This may be seen still in an almost unimpaired state, in respect to the hilly portions unfit for tillage, by visiting the large cattle pastures near Manhattan and elsewhere. The flinty residual soil is clothed by a wealth of bluestem grass which in the spring is decorated by numerous species of wild flowers. The waving herbage and the infinite diversity of contour of the gently rolling hills, terraced by escarpments of limestone strata, best displayed by the lengthened shadows of early morning or toward nightfall, constitute a scene of beauty of which the eye never tires.

The creek and river bottoms presented beauty of another type. The watercourses were bordered by timber, and on the adjacent flat land grass grew far more luxuriantly than on the uplands. Flowers of numerous species also occurred abundantly in their season. A good idea of these flowers may be obtained from survivors at some points along the right of way of the Union Pacific Railroad. An area of the original grass-covered bottom may be seen on the east side of the Fort Riley military reservation, across the Kansas River from the buildings of the post.

At numerous points near Manhattan little valleys extend into the hills. Some of these valleys carry relatively permanent creeks, others only storm water. In early days the latter had some brush or small trees at the lower altitudes. With the prevention of prairie fires, such growth has gradually spread to the tops of the adjacent bluffs. In this respect the scenic effect of the region has been enhanced by settlement.

TOPOGRAPHY OF THE TOWN SITE

When the locality, now occupied in part by the city of Manhattan, was first settled, it was a beautiful, grassy, nearly level expanse, covering about three square miles. It was bounded on the south by the Kansas, or Kaw, River, which turned to the north and also formed part of the east boundary. The Blue River, coming in from the north, formed the remainder of the east boundary. At the west and the north were abrupt hills, between which, toward the northwest, the country opened out into more gently rolling stretches. Attention may be called to some of the prominent detailed modifications of the surface of this general area.

The northwest part of the townsite was distinctly higher than

the remainder. Beginning at the Kansas River, near where the south end of Fourteenth Street now cuts the old Kansas River channel, the line of this "bench," as it was called, may still be traced across the city in a northeasterly direction. The original topography is not prominently suggested now because of the cuts and fills made to give fairly uniform grades to the streets and to the drainage gutters at their sides. By taking note of the position of the retaining walls, and of building sites which stand above the level of the street, it is still possible to observe some of the original face of the bench and to trace its course, partly by means of these higher areas and partly through unfilled lots. The approximate course from Fourteenth and Colorado streets passes near Houston Street and Manhattan Avenue, Eleventh Street and Poyntz Avenue, Ninth and Fremont streets, and Eighth and Moro streets.

The bench was not all of the same altitude and was distinctly higher on the area enclosed approximately by Fourteenth, Moro, Ninth, and Fremont streets. This more elevated area was more sandy in the composition of the soil, and part of it was used for residences in advance of adjacent land. Alongside the front of the bench, between Humboldt and Laramie streets, there was a depression of considerable width from which the water did not drain naturally and in which it stood at some depth, probably two or three feet in some parts. On the south part of the townsite, near Pierre Street and running east and west from near Second Street to Fourth or Fifth streets, another depression holding water existed which was known as Pillsbury's Pond. Traces of this area may still be seen at the rear ends of lots west of Fourth Street and facing Pierre. On the bench, north of the more elevated area referred to previously and covering much of the space bounded by Moro, Eleventh, and Vattier streets and Manhattan Avenue, directly east of the present campus, was another area with deficient, natural drainage. On this area water stood more or less to a depth of several inches, and the vegetation was restricted to coarse weeds. It will be seen that the existence of these undrained areas on the townsite was a determining factor in respect to roads and building sites during the earlier decades of the history of the town.

TOPOGRAPHY OF THE CAMPUS

The square now enclosed, for the most part, within a stone wall and constituting the campus proper of the College, consists in its lower altitudes of part of the bench. The higher portion is more like the upland region of the country to the northwest, and is underlaid by an undisturbed stratum of limestone not far below

the surface. Outcrops of this may be seen at the tennis courts, and considerable had to be removed in making the courts.

The campus square was traversed by two very definite drainage channels, one cutting across the southwest corner and the other across the northeast corner. A less definite drainage depression cut across the southeast corner. The upland, plateau-like formation, constituting the higher part of the campus, projected southward far enough so that it was cut across by Anderson Avenue, and the southernmost point was about one hundred fifty feet south of Anderson Avenue on Sixteenth Street. Water flowing across the southwest corner of the campus followed a narrow, shallow, winding channel and passed around the southernmost point of the upland, and, when in sufficient quantity, turned to the northeast and flowed through the lowland now occupied by the grove northeast of Thompson Hall, and spread out over the land to the east, replenishing the pool east of the campus, previously mentioned. When there was a heavy rainfall within a short time, water in this channel spread over the bench quite extensively, some flowing south and covering land in the park and the area west, the remainder flowing toward the northeast.

THE HOWARD DITCH

This overflowing was quite deleterious to some of the land south of Anderson Avenue, and in 1879 Mr. C. G. Howard, who owned much of this tract, obtained from the county commissioners permission to cut a ditch along the north side of Anderson Avenue, and thus next to the college campus. The material taken from the ditch was used to raise the road to the west, and, to a less extent, to the east, and a shallow ditch was continued along the south side of the campus to the corner and, passing under a culvert, crossed Manhattan Avenue diagonally to the alley between Moro Street and Bluemont Avenue. This ditch was continued to Twelfth Street, where it was taken north to Bluemont Avenue. Here it was turned to the east and carried the water to the Blue River. About that time, the city engineer opened a surface storm sewer down the middle of Bluemont Avenue from about Tenth Street. The idea was ultimately to locate an underground storm sewer on that line. The ditch eroded badly, and some years later it was filled.

STORM SEWERS

The Howard ditch was always a detriment to the college campus. The floods of water pouring through it gradually eroded soil on the north side so that the stone wall on the south line had to

be removed for a considerable length. In the summer of 1914, the college constructed a reinforced concrete storm sewer on the north side of Anderson Avenue. This is 4 x 5 feet in section, and received the water somewhat east of Seventeenth Street and conveyed it to a point just east of the entrance for trucks near Thompson Hall.

When the west wing of the stadium was erected in 1922, and the present football field completely graded, a storm sewer was built, beginning near the west side of the stadium and traversing the field in a southeasterly direction to Anderson Avenue where it connected with the other sewer.

In February, 1939, connection was made with a city storm sewer which carries the water from Anderson Avenue south on Fourteenth Street to the city park and then across to make connection with the Manhattan Avenue storm sewer at Poyntz Avenue, by which it is carried south to the old bed of the Kansas River through which Wildcat Creek now flows. Water from the northwest, therefore, does not cross the surface of the southwest corner of the campus at all now, unless there is a very unusual precipitation. Floods so occasioned flow over the football field and adjacent areas and on into the town, as in earlier days.

The natural drainage channel which crosses the northeast corner of the campus ends opposite Bertrand Street. Formerly water in this channel flowed into a ditch along that street to a drainage ravine leading into the Blue River. In times of heavy rainfall within a short period, flood water pouring down this watercourse spread over the bench land and flowed south on Manhattan Avenue, the overflow blending with that coming from the southwest. Such overflows kept the depression east of the campus wet and muddy much of the time during the early years. Proper provision has not yet (1939) been made for carrying this water away.

THE OLD SITE OF THE COLLEGE

The first site of the college buildings was about a mile west of the present campus. One hundred acres of land and a building were donated to the State of Kansas by the Bluemont Central College Association as an inducement to locate the Kansas State Agricultural College there. The adjacent region and the hills to the northwest are typical of the contour of the uplands of this section of the state, and as a whole President Denison was amply justified in his enthusiastic description of the beauty of the outlook in all directions from the College as published in the second annual catalogue. The present campus is less preeminently fortunate in respect to outlook, but the soil is much better adapted to the creation

of charming floral and arboreal effects in the immediate landscape. It is in fact one of the beauty spots of Kansas, and from it one may drive in ten minutes to the natural beauties of the environment.

Although the scenic characteristics of the old site were excellent for a prairie state, the land was not really adapted to experiments in forestry and agriculture. The arable stratum of soil is underlaid by stiff clay not far from the surface. Early plantations of trees are represented now only by some rather inferior Austrian pines. Experimental orchards set in comparatively recent time have not survived the deficiency of rainfall of the last few years.

Previous to the era of cement concrete, a bed of flint gravel on the farm furnished material for surfacing roads on the campus. Another interesting feature of the old site is a dug well, 124 feet in depth, which has yielded a generous supply of water up to the present, while wells on neighboring farms have failed.

In 1926 the Polly Ogden chapter of the Daughters of the American Revolution, and the Riley County Historical Society cooperated in placing an historical marker at the southeast corner of the old campus. This is a two-ton glacial drift boulder from Pottawatomie County, to which is attached a bronze plate commemorating prominent founders of the Bluemont Central College Association and giving important dates concerning the Bluemont College building.

CHAPTER II

SOME OF THE EARLY SETTLERS AND THEIR RELATION TO THE COLLEGE

STUDENTS with only a little knowledge of the history of the United States know that eastern Kansas was the scene of a conflict between the advocates of slavery and those who favored its abolition. The repeal of the Missouri Compromise and the intro-



ISAAC GOODNOW

Professor of natural science Providence (R. I.) Seminary, 1848-1855. Promoter of Bluemont Central College, 1856-1863. Promoter of Kansas State Agricultural College, 1863-1873.



WASHINGTON MARLATT

Minister Methodist Episcopal Church. Promoter of Bluemont Central College, 1856-1863. Principal Bluemont Central College, 1860-1861.

duction of the principle of "squatter sovereignty" created a situation which gave the control of that region to its inhabitants. Thereupon, a race ensued between the proponents and the opponents of slavery, the object of which was to get a controlling majority of the population of the territory. To promote immigration of anti-slavery settlers, emigrant aid companies were formed, especially in New England, the object of which was to organize colonies and to people the disturbed region with anti-slavery settlers.

THE BOSTON COMPANY

Early in this movement, Mr. I. T. Goodnow, professor of natural science in Providence Seminary, Providence, Rhode Island, where he had taught for six years, felt impelled to throw himself into the scales on the side of freedom. He entered into correspondence with his brother-in-law, Rev. Joseph Denison, who was then preaching in Boston. They met in the city of Providence in December, 1854, and listened to a rousing lecture by Eli Thayer, the founder of the New England Emigrant Aid Company. With him, after the lecture, they discussed the pros and cons of the enterprise until nearly midnight, and the decision was for emigration. Professor Goodnow immediately resigned his position, and spent three months writing for the newspapers, and talking at various places to promote the cause. He organized a company of some two hundred to leave Boston on March 13, 1855. Mr. Goodnow, with several others, left on the sixth of March, one week ahead of the main company, in order to select a town site with good farming land around so that there would be no unpleasant delay for the company in settling. On the train, Mr. Goodnow met Rev. C. H. Lovejoy, of New Hampshire, who, with others, had started for Kansas under the influence of Mr. Goodnow's writing. The details of the settlement of Manhattan and its subsequent history will be given only insofar as they relate to the origin and progress of the college.

Mr. Goodnow and his committee reached the present site of Manhattan, March 24, 1855. He viewed it from the top of Bluemont and stated that it was the most beautiful town site that he had ever beheld. The committee decided to look no further, and to hurry the arrival of the remainder of the company so that they would be ready to vote at the election to be held March 30, and that they might secure the town site before others came.

EARLIER SETTLERS

However, Mr. Goodnow and his company were not the first on the ground. As early as June, 1854, Col. George S. Park, of Parkville, Missouri, had taken a claim just east of the mouth of Wildcat Creek, and had erected a cabin upon it which served as a blacksmith shop. Furthermore, on the west side of the Blue River, below Bluemont, S. D. Houston, of Illinois, Judge Saunders W. Johnston, of Ohio, Judge J. M. Russell, of Iowa, Dr. H. A. Wilcox, of Rhode Island, and E. M. Thurston, a lawyer from Maine, all reputed to be college graduates, had met in the fall of 1854 and located a town which they called Canton. A dugout at the base of Bluemont was their only improvement.

Mr. Goodnow and other members of his committee, Luke P. Lincoln, Charles H. Lovejoy, N. R. Wright, C. N. Wilson, and Joseph Wintermute decided to consolidate their company with those already on the ground and form one strong company. The Boston Colony arrived late in March, and Colonel Park, who had spent the winter in Texas, returned to his claim early in April, 1855. A consolidation of interests was effected and a constitution adopted April 6. The minutes of the trustees, April 18, include the following:

"Voted that Mr. Park be invited to address the trustees in reference to an agricultural school. Mr. Park responded to the invitation."



GEORGE S. PARK

Promoter of Bluemont Central College, 1856-1863. Founder of Park College, Parkville, Mo., 1875.

This trivial incident may be regarded as the beginning of Kansas State College!

Colonel Park was a man of unusual ability and character and retained his interests in Manhattan for some years. Later he left and established Park College at Parkville, Missouri, an institution which has grown to be of considerable importance and excellent standing. In it the scholastic features of education are accompanied by industrial work in the physical plant of the institution.

Colonel Park had located his claim with the intention of using it as the site of a town which he called Polistra. The name Boston was chosen for the town planned by the united interests.

THE CINCINNATI COMPANY

June 1, 1855, the Cincinnati and Kansas Land Company, which came up the river on the steamer Hartford, found it impracticable to proceed to the junction of the Republican and Smoky Hill Rivers above Fort Riley, as had been planned. A town site had been laid out for it near the site later occupied by Junction City. The Cincinnati group was induced to join the others in the establishment of a town, and the wishes of that company were met by

adopting the name Manhattan. Prominent members of the Cincinnati group were John Pipher and Andrew J. Mead.

In addition to those already mentioned the following may be named as among the residents of Manhattan or its vicinity who had some early connection with the College or with Bluemont Central College: Washington Marlatt, John Kimball, C. E. Blood, R. L. Harford, W. A. McCollom, James Humphrey, Welcome Wells, and Thomas C. Wells.

BLUEMONT CENTRAL COLLEGE

Many of these early settlers were well educated, and were alive to the importance of providing institutions of learning. Prominent among these were I. T. Goodnow, Joseph Denison, and Washington Marlatt, who frequently discussed among themselves the project of establishing a college. February 9, 1858, they, with S. D. Houston, C. E. Blood, Geo. S. Park, S. C. Pomeroy, W. A. McCollom, and T. H. Webb, as incorporators, obtained, from the legislative assembly of the Territory of Kansas, a charter for the Bluemont Central College Association.

The objects of this association were the promotion of education and science in Kansas Territory, and it was authorized to locate a college at or near Manhattan to be called Bluemont Central College. It was also empowered "to establish in addition to the literary department of arts and sciences, an agricultural department with separate professors to test soils, experiment in the raising of crops, the cultivation of trees, and upon a farm set apart for the purpose, so as to bring out to the utmost practical result, the agricultural advantages of Kansas, especially the capabilities of its high prairie lands."

Financial support for the erection of a building was obtained largely by solicitation in the East, but significant contributions were also made locally. Among the most generous of these were those of George S. Park, \$500, Joseph Denison, Isaac T. Goodnow, S. D. Houston, and Washington Marlatt, \$300 each, and John Kimball, \$200.

The cornerstone of the building was laid May 10, 1859. According to T. C. Wells, about 300 persons were present, and some very good speeches were made. The work of erection was pushed vigorously, and by the end of the year the building was fit for use. It was 44 x 60 feet in size, three stories high, and constructed of the local limestone.

THE PREPARATORY DEPARTMENT OPENED

A primary and preparatory school was opened January 9, 1860, with Rev. Washington Marlatt as principal, and Miss Julia A.

Bailey as assistant. Fifty-three students were enrolled that winter. The next fall there were but 15, and Miss Bailey was permitted to live in the building with one or more students. The next spring Mr. Marlatt and Miss Bailey were married. The school continued in operation until 1863. Full information concerning teachers is not extant. Advertisements were signed "I. T. Goodnow,



SAMUEL D. HOUSTON

Promoter of Bluemont Central College,
1856-1863. Regent Kansas State Agricultural College, 1863-1869.



JOHN KIMBALL

Promoter of Bluemont Central College,
1856-1863.

Principal." June 27, 1862, his name appears as "Acting President" subscribed to what seems to have been the last advertisement published. This announced the fall term as beginning September 3, and the winter term, December 3. Each term was eleven weeks in length.

It does not appear that Professor Goodnow did any teaching himself. One of the teachers employed was Miss Nancy Bemis, a sister of Mrs. T. C. Wells. Miss Josie (?) Bishop is recalled by Mrs. Mattie Mails Coons as having been another, and Miss Mary Hubbard seems to have been a third. Rev. Robert L. Harford may have given instruction also. From September, 1861, the tuition paid by the students was the only source of revenue for payment of all expenses of the school.

At no time in its history did Bluemont Central College give any instruction that professed to be of college grade. Certainly most of its work was of the elementary district school type.

AN ATTEMPT TO GET THE STATE UNIVERSITY

An effort was made to get the legislature of 1861 to locate the State University at Manhattan. February 28, the trustees of Bluemont Central College passed the following resolution: "Resolved by the Trustees of Bluemont Central College Association that we donate to the State of Kansas our College Building, Library, and apparatus, together with one hundred and twenty (120) acres, more or less, of land contiguous, as a College site, on condition that the Legislature locates here permanently the State University."

The Manhattan City Council, March 23, appropriated \$100 to defray the expenses of two "lobby members at the capitol for the purpose of securing the location of the State University at Manhattan." The bill providing for such location met considerable opposition but was passed. This was announced by a paragraph in the *Western Kansas Express* (Manhattan), June 1, 1861, but before the paper was printed it was necessary to add that the governor had vetoed the bill. The *Express* said that "The governor assigns several feeble reasons for this act, which merely amount to the fact that he wants to put in a bid himself at a future time." Gov. Charles Robinson was a citizen of Lawrence, and November 2, 1863, the University was located in that city.

LOCATING THE LAND-GRANT COLLEGE AT MANHATTAN

The provisions of the Morrill Act approved July 2, 1862, were accepted by the State of Kansas through a joint resolution of the legislature approved by Gov. Thomas Carney, February 3, 1863. Another opportunity for Manhattan to secure a state institution was thus created, and the offer of the Bluemont Central College building, with its library and apparatus and accompanying land, was renewed. Only 100 acres of land were included, however, instead of 120.

This offer of property which had cost about \$20,000 undoubtedly influenced the legislature strongly, and the proposal of the Association was accepted, and "a college for the benefit of agriculture and the mechanic arts" was "permanently located" upon the site described, upon condition that the Association should cede in fee simple to the State of Kansas the real estate and buildings, and transfer the library and apparatus belonging to the Association. This act was approved February 16, 1863, and became effective February 19. The Association was given six months after the date of approval within which to transfer the property.

A deed of gift, under the provisions of the act, and by authority of the trustees of the Association, was executed under date of June

10, 1863, by I. T. Goodnow, president, Washington Marlatt, secretary, and Abraham Barry, James Humphrey, Joseph Denison, John Pipher, Wm. A. McCollom, James M. Lackey, Samuel D. Houston, and Robert L. Harford, additional members of the board of trustees.



BLUEMONT CENTRAL COLLEGE BUILDING

The first College building. This was erected by the Bluemont Central College Association in 1859 and given to the State in 1863. It was razed in 1883. The cut shown is from a drawing made from a map of Manhattan published in 1867. This map carried an advertisement of the College, accompanied by a lithograph made from a photograph taken by George Burgoyne. It is imperfect, especially in that it does not show the name Bluemont College cut in the stone arch over the window in the gable. This arch is now preserved in the wall of the college library building.

The transfer of the deed was made a feature of the celebration of Independence Day which was held July 2. There was a large attendance, and everybody had a good time.

In the meantime the minutes of the trustees of the Bluemont Central College Association show that on March 5, 1863, the prudential committee met and voted to request the presiding bishop of

the Kansas Methodist Episcopal Conference, to be held in Lawrence, March 11, 1863, to appoint the Rev. Joseph Denison to the presidency of Bluemont Central College. This was after the college building had been offered to the state and accepted by it, and could refer only to an organization which was retiring from the field of education. The action was probably taken in order to put Doctor Denison in line for election to the presidency of the Kansas State Agricultural College.

April 16, 1863, at the annual meeting of the trustees of the Association it was voted that "The president of the College be requested to have the college building vacated of families within one week, and put in as good repair as possible, preparatory to its being delivered over to the State as an Agricultural School." This discloses the limited extent to which the building was in use for school purposes, and suggests that possibly no winter term of school had been held that year.



Promoters of Bluemont Central College and Kansas State Agricultural College.

Left to right, upper row, Robert L. Harford, J. G. Schnebly.

Lower row, W. Marlatt, J. Denison, I. T. Goodnow.

Mr. Schnebly was a member of the first faculty of K. S. A. C.

Mr. Harford was connected with Bluemont Central College.



JOSEPH DENISON

Mental and moral science, 1863-1873; ancient languages, 1863-1868; political economy, 1869-1873; history, 1871-1873. President, 1863-1873.

CHAPTER III

THE ADMINISTRATION OF JOSEPH DENISON, SEPTEMBER 1, 1863, TO AUGUST 31, 1873

KANSAS State College is one of the group of so-called land-grant colleges organized under the provisions of an act of Congress approved July 2, 1862. The bill was introduced by Senator Justin S. Morrill, of Vermont, and the act was signed by Abraham Lincoln. The act donated to each state accepting the terms of the grant, 30,000 acres of land for each member of the House and the Senate to which the state was entitled. Kansas, having two senators and one representative at that time, thus received 90,000 acres ultimately.

This grant of land was for "the endowment, support, and maintenance of at least one college where the leading object shall be, without excluding other scientific and classical studies and including military tactics, to teach such branches of learning as are related to agriculture and the mechanic arts, in such manner as the legislatures of the states may respectively prescribe, in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions in life."

It would lead too far to attempt to trace the history of the educational movement which culminated in the passage of the Morrill Act of 1862. Many organizations had a part in it. One of the most prominent advocates was Prof. J. B. Turner of Illinois, who for many years worked in the interest of agricultural and industrial education in colleges. His public address delivered in 1851 at Granville, Illinois, was widely circulated, and presented definite plans for an industrial university. Mr. Morrill was probably influenced by this and other published material, but doubtless had an independent appreciation of the need of special education for the industrial classes, and a personal satisfaction in promoting it.

KANSAS STATE AGRICULTURAL COLLEGE

By the terms of an act of the Kansas legislature approved March 3, 1863, the College provided for by the act of February 16, 1863, was designated as the Kansas State Agricultural College, and its government was vested in a Board of Regents "to consist of the governor, secretary of state, superintendent of public instruction, and the president of the College *ex officio*, and nine others,

who shall be appointed by the governor and confirmed by the senate: Provided that not more than three of those selected shall be of the same religious denomination. Three of those appointed



JONATHAN B. TURNER

Professor in Illinois College, 1833-1848.
Promoter of industrial education, 1848-
1868. Portrait published by courtesy of
The Macmillan Company.

shall hold their office until the second Monday in January, A. D., 1865, and three until 1867, and three until 1869; and their several successors shall hold their office for a term of six years."

THE REGENTS MEET

The first recorded meeting of the Board of Regents was held at the College, July 23, 1863. This was referred to as an adjourned meeting. Rev. Joseph Denison, A. M., was elected president of the College, and J. G. Schnebly, professor of mathematics and natural science. A prudential committee of five local members of the Board was also elected, and was given authority to act upon financial matters subject to approval by the Board at the succeeding meeting.

The president of the College was "authorized to employ a female teacher for the primary department, subject to the approval of the prudential committee," and the department of music was referred to the prudential committee.

The Board also voted "Inasmuch as we have the Kansas State Normal School and the Kansas State University; therefore, Resolved that the Regents petition the next legislature to change the name of this institution to the 'Kansas State College.'" Later minutes do not show that this interesting resolution was followed up at any time.

At the next meeting of the Board of Regents held December 2, 1863, numerous acts of the prudential committee were approved. One of these was the appointment of President Denison to be an agent to solicit funds for the institution in adjoining and eastern states. On account of military conditions he did not go, but obtained within the state about \$1,500.

At this meeting, the Board also approved a contract made by President Denison with the directors of the local school district to have its scholars instructed in the College during the winter term, principally in the preparatory department, for the sum of \$130. Such instruction to the district school students was given for at least two years.

This solicitation of donations of money and the provision for district school children were features continued from the Bluemont school.

THE FIRST FACULTY

When Kansas State Agricultural College opened in the Bluemont Central College building, in 1863, the faculty consisted of Rev. Joseph Denison, A. M., president and professor of mental and moral science and ancient languages; J. G. Schnebly, A. M., professor of mathematics and natural science; Miss Belle M. Haines, teacher in the preparatory department; and Mrs. Eliza C. Beckwith, teacher of music on melodeon and piano.

December 2, 1863, the Regents elected Rev. N. O. Preston, A. M., professor of mathematics and English literature, and J. Everts Platt to be in charge of the preparatory department and professor of vocal music. The first annual report states that "both these gentlemen may be ready to enter upon their duties in the institution at the commencement of the spring term, about the 10th of March, 1864." No record is available which shows when the service of Professor Preston actually began. Professor Platt took up his work September 1, 1864.

In June, 1865, the Board of Regents allowed Professor Schnebly conditional leave of absence for a month after the opening of the next term, but he did not return, and his resignation was accepted December 18, 1865. He is said to have been an excellent teacher.

Prof. Benjamin F. Mudge, December 18, 1865, was elected

"professor of natural history and natural science for the next ensuing term commencing January 1, 1866, and ending June 27, 1866." June 26, 1866, he was "unanimously elected to the permanent chair of professor of natural science and higher mathematics." His connection with the College continued to February



Left—J. E. Platt, English and mathematics, 1864-1883. Center—B. F. Mudge, natural history, 1866-1874. Right—J. H. Lee, languages and literatures, 1866-1875.

7, 1874. He taught many different subjects, but from 1870 he was designated simply as professor of natural sciences. At one time or another he taught astronomy, physics, meteorology, botany, zoology, entomology, physiology, mineralogy, geology, physical geography, agricultural chemistry, conic sections, and other subjects. He was much beloved by students, colleagues, and the public, and had a national reputation as a geologist. His service to science and the College is still recognized in current conversation. As an inspiration to his students, his influence was far-reaching.

The first death in the faculty was that of Prof. N. O. Preston, who died suddenly February 14, 1866. The earliest minutes of the faculty that are preserved record the esteem in which he was held by his associates. It is stated in the Fourth Annual Report that he was present at the laying of the cornerstone of Bluemont College, and had been a steadfast friend of the institution, and "had shown himself a scholar, an efficient administrator and teacher, and a true Christian gentleman." It may be of interest to note that the summer after his death, his widow erected a residence on the lot of land which is now the northwest quarter of the campus, and that the residence, after occupation by successive presidents, professors, and others, and several enlargements and changes, is now (1939) the college infirmary for students.

July 23, 1866, Rev. James H. Lee was elected to succeed Professor Preston as professor of the Latin language and English literature. Later he taught Greek also, but in 1874 his chair was limited to English language and history, though he taught other subjects also, such as logic, philosophy, and Butler's Analogy. His connec-



Left—Elbridge Gale, Horticulture and botany, 1871-1878. Center—J. S. Hougham, agriculture and agricultural science, 1868-1872. Right—F. E. Miller, agriculture, 1871-1874.

tion with the College closed, May, 1875, and the Board of Regents expressed its "heartly appreciation of his fidelity, ability, and efficiency" Professor Lee was an inspiration to students, and withal a doughty controversialist.

The importance of military training was fully recognized by those who had witnessed the border conflicts and the Civil War, and attempts to provide instruction of this kind began in 1865. In December, 1867, Lt. Col. J. W. Davidson, of the United States Cavalry, was detailed by General Grant to be professor of military tactics. He had been brevetted a major general, and was habitually addressed and referred to as "General Davidson." He entered with spirit and sincerity upon his work at the College, and introduced an elaborate course of military subjects. All physically fit male students were required to take military drill, and other military features might be elected. However, after three years the pressure for officers in the army was such that General Davidson was returned to active duty. No retired officer was available to succeed him, and this work was abandoned until 1881.

Prof. J. S. Hougham, of Franklin College, was elected to the professorship of agricultural science, and began service early in April, 1868. This was regarded as the fruition of the long search for a man to occupy the chair of agriculture. Professor Hougham

was an able man, perhaps better qualified in the "sciences related to agriculture" than in farming as a practical art. The paucity of financial provision for farm operations made it impossible to meet adequately the demand for practical work. The condition is vividly indicated by the fact that in his report for 1870 Professor Hougham wrote: "We hope to have a wagon and a team of horses; to procure some good specimens of different kinds of stock * * * ." With more or less change in his duties, Professor Hougham remained until March 27, 1872.

Rev. Elbridge Gale was on the Board of Regents from 1865 to 1871. In 1871 he was made instructor in horticulture and superintendent of the nursery. He was assigned the rank of professor the next year. Professor Gale had operated a nursery on the lot of land which he sold to the College and which is now the northeast quarter of the campus. As an officer of the College, he continued the management of the nursery which he had owned previously. He gave excellent service to the College in several capacities, until August 30, 1878.

Major Fred E. Miller, a man who had studied at the Michigan Agricultural College, but had not continued to graduation, was employed as professor of practical agriculture and superintendent of the farm, August 2, 1871. His published reports and the comments of many writers in agricultural papers show that Major Miller made a very commendable record in his departmental work. It was during his incumbency that the new college farm was purchased, and that work began on the tract that is now the campus. The wing of a barn was built, and it is now Farm Machinery Hall. His controversy with the next administration led to his separation from the College, February 7, 1874.

The catalogue for 1871-72 shows Ambrose Todd as superintendent of the shop and instructor in mechanics. In a short article written by him and printed in the *Industrialist*, May 22, 1875, he states that he did shop work for the College in 1871-72, using the basement of the college boardinghouse of which he was steward, and that in the fall of 1872 this type of work in wood and iron was offered to students in a 20 x 40 ft. frame building, near the boardinghouse. This instruction continued to be in his charge until August 30, 1878, when he was succeeded by Mr. T. T. Hawkes.

Dr. H. J. Detmers was employed as professor of veterinary science and animal husbandry, and began service April 5, 1872. He also taught a class in German that spring, but the next year his daughter, Miss Jennie Detmers, was employed to teach German and chemistry. The connection of Doctor Detmers with the College ceased February 7, 1874. While here he did substantial work

in veterinary medicine, and his ability was proved by his subsequent career elsewhere. He was a German with very imperfect enunciation of English, and this impaired his efficiency as a teacher.

Miss Mary F. Hovey was chosen to be professor of German and English language and literature, and began service October 4, 1869. She was also preceptress of the young women. She resigned her



Left—Ambrose Todd, mechanic arts, 1871-1878.
Right—H. J. Detmers, veterinary science, 1872-1874.

position effective March 27, 1872, and her going was regretted by many friends.

Succeeding Mrs. Eliza C. Beckwith, Dr. C. Hubschman became professor of instrumental music, December 15, 1864. The annual report for 1865 shows Miss Emily M. Campbell as teacher of instrumental music, and the catalogue for 1866 and 1867 names Mrs. Laura C. Lee, wife of Prof. J. H. Lee, as employed in that capacity. By December, 1867, Mrs. Lee had resigned, and Miss Campbell was again in charge. Mrs. Hattie V. Werden held the position from 1869 to 1877, and was a very talented musician both as a singer and as a pianist. She was followed by Miss Carrie Steele for the year 1877-78, when Prof. W. L. Hofer was elected, and he remained with the College to 1886.

As teacher of drawing and a tutor in other subjects, the College was fortunate in having Miss Lizzie J. Williams from 1871 to 1873. She also served as secretary of the faculty. She was a graduate of Vassar College, and a very charming woman. As Mrs. Champney, she was noted as an author through a considerable period after leaving the College.

It will be noted that the faculty of the College was very small

at its opening, and that in general tenure in the important positions was quite secure during this administration.

OPENING OF THE COLLEGE

The College opened September 2, 1863, and the first term closed December 1. Fifty-two students were enrolled, twenty-six young men and twenty-six young women. The total number for the year 1863-64 was 106. Of these, 92 were in the preparatory department, and 15 were eight to ten years of age. About one half studied the higher branches, such as Latin, physiology, and mathematics. Spelling, writing, reading, geography, grammar, and mental arithmetic were available for those not prepared for higher work. General exercises in public speaking and calisthenics were required, and practice in military work was given under the direction of one of the students who had had military experience. The faculty expected to form classes in chemistry, geology, botany, natural philosophy, and mental philosophy before long. It also planned to offer the facilities of a commercial college.

The Manhattan *Independent* for September 14, 1863, printed the following: "President Denison will give the first lecture of the course, for the present term at the State Agricultural College, on Wednesday evening, the 16th inst., at 7 o'clock. Subject, Teaching by the Object System.

"On Wednesday evening, the 23d, Prof. J. G. Schnebly will lecture on Astronomy, with illustrations by the magic lantern.

"The number of students already present in the institution and the interest manifested are equal to the most sanguine expectations of its friends.—The exercises in calisthenics and gymnastics, with the military drill and the ride on horseback once a week, are matters of special interest."

The following advertisement appeared in the *Independent*: "The winter term of the Kansas State Agricultural College will commence Thursday, December 3d. 1863 and continue 13 weeks. Tuition in common branches per term, \$4.00; in higher branches including languages, \$5.00; incidental expenses, \$.50; extra in music on piano per term, \$8.00; use of piano per term, \$2.00; music on melodeon, \$6.00; use of melodeon, \$1.00. The new first class piano and melodeon lately donated to the institution make the facilities for instruction in music all that could be desired. So also the new first class electrical machine with its accompanying apparatus added to the previous list of apparatus makes the facilities for teaching philosophy and chemistry equal if not superior to those of any institution in the state.

"The building is a superior one, and the location for health and pleasantness not surpassed.

"The institution is well supplied with outline maps, with a fine set of charts for teaching by the Object System, and also with a set of anatomical charts, for teaching anatomy and physiology. Calisthenics and the new gymnastics are taught, and the coming term, we intend to begin a commercial college, so that full and thorough instruction may be given in the science of book-keeping.

Joseph Denison, President.

State Agr'l. College, Nov. 27, 1863."

CURRICULA

The college catalogues from 1863 to 1873 show that a number of different curricula were offered. Some of these were groups of subjects extending over a few terms only, and the extent to which some of those of greater length were actually entered upon by students is quite uncertain. The classical curriculum was for several years the chief basis of instruction, and the degree Bachelor of Arts was awarded to most of the graduates up to and including 1876. Several other curricula were listed and even formulated in some detail, but the catalogues give no information concerning the extent to which these were chosen. There are no records at the College showing the subjects studied by individual students for any part of the period 1863 to 1873.

A NEW TYPE OF COLLEGE

The administration of President Denison constitutes a fairly distinct section of the history of the College. President Denison was one of the founders of Bluemont College, and, with his associates, estimated college work by the standards to which they had been accustomed; namely, those of the classical type. Education for the industrial classes as provided by the Morrill Act had not been worked out, and opinions concerning what it should be or include varied greatly. It was generally understood that such institutions should offer courses and training of special value to those planning to be occupied in farming or mechanic arts. The law definitely did not limit the scope of the institution to such subjects, and the extent to which curricula should consist of literary and other cultural subjects received almost acrimonious discussion for a decade.

NO QUALIFIED MEN

Another great difficulty of this period was the almost total non-existence of men who were competent to give college instruc-

tion in agriculture, and in sciences in their relation to that art. The employment of Professor Hougham in 1868 relieved the situation for a time. He was not a practical farmer, but his reports show that considerable progress was made under his direction, in establishing plantations of fruit trees and grape vines, and in trials of farm crops, with very little money for the purpose.

In 1871 the superintendency of the farm was assigned to Major Fred E. Miller, whose training at the Michigan Agricultural College justified expectation of improvement in the agricultural conditions here. He took up with great vigor the development of the college farm, and experiments with agricultural crops. His first report for the year ending October 31, 1872, covering thirty pages, gives a very favorable impression of him in respect to the work which he was accomplishing. The report for 1873, while less voluminous, indicates successful continuation of agricultural investigation.

INADEQUATE FINANCIAL SUPPORT

Not only was the scope of agricultural and industrial education undefined, and men qualified in agriculture and in mechanic arts very scarce, but the College was greatly hampered by lack of money. The estimate of the founders of the institution that the grant of land would yield an endowment fund of \$500,000.00 was verified with singular precision, but unsold land yielded no income. The development of the College in lines requiring apparatus, livestock, and other material equipment was necessarily much delayed; and it was only natural that a large part of the instruction in the early days should be given in fields in which the salaries of the teachers were the chief expense. Even with that limitation, it was very difficult to obtain funds for the operation of the college.

Any fair consideration of the Denison administration requires knowledge of the financial conditions existing at that time, and of the failures of the legislature to make adequate appropriations. Although the land grant ultimately produced an endowment of more than half a million dollars, there could be no income from it until land had been selected and some of it sold and the proceeds invested.

The legislature of 1863 made no appropriation whatever for the College; that of 1864 appropriated \$2,700 for salaries "for the years A. D. 1863 and 1864", \$125 for insurance of buildings, library, and apparatus, and \$60 for lightning rods. In 1865, \$125 was appropriated for insurance, and \$3,200 for salaries and two hundred copies of the catalogue. In 1866 the appropriations were: \$125 for insurance, and \$60 for lightning rods; \$4,000 for current expenses, contingent on its receipt in income from the investment of the land endowment funds; and provision was made for state

bonds to the extent of \$5,500, which it was expected would be repaid by income from the endowment to be received in the future. These bonds were to cover arrearages and the current expenses for 1866.

In 1867 the legislature apparently realized that material income from the endowment was a feature of the future and made a number of helpful appropriations. Grouping these, \$2,120 was allowed for fencing and otherwise improving the college farm, \$1,000 for salary of a resident agriculturist, and \$1,500 for a residence for the agriculturist; for repairs and improvements on building and grounds, \$711.50; insurance, \$125; museum and philosophical apparatus, \$825; furniture, \$500; reference books, \$200; and library shelving, \$100.

A LOAN FROM THE STATE

Besides the sums thus definitely allowed, \$5,200 was provided for salaries "to be taken and deemed a loan from the State of Kansas to the State Agricultural College, to be reimbursed to the State after the State shall have been reimbursed for the \$5,500 lent to said college for the year 1866."

None of the support given by the legislature of 1868 was stated to be as a loan. It included \$6,900 for salaries, \$1,000 additional on the house for the agriculturist, \$800 house rent for the professor of military science and tactics, \$280 to pay for appraising endowment lands, and \$255 for other purposes.

However, in 1869 the legislature returned to its previous position and allowed \$6,300 as a loan for salaries. It appropriated \$394 to complete the agriculturist's residence, and provide a cistern and outbuildings; \$300 for implements, trees, seeds, etc.; \$800 for house rent for the professor of military science and tactics, and \$75 for arm-rack for the military department; and \$450 for other purposes.

AGRICULTURE AIDED BY "COLLEGE GREENBACKS"

In 1870 the only support given the college was through "An act to aid in the development of the agricultural department of the Kansas State Agricultural College." This made no appropriation, but relieved the College from payment of "sums advanced *** from the year 1863 to the year 1869, inclusive". Money to carry out the objects named in the law would be at hand only when income from interest on the endowment exceeded the amount required to pay orders then due for professors' salaries. Without waiting for such excess to appear, the Board of Regents, in anticipation of expected excess funds, issued orders on the treasury,

with various future dates for their payment. These orders were on fine lithographed forms in denominations of one hundred dollars each. Interest on the endowment was not received in sufficient amount to pay them and meet current expenses; and after repeated efforts extending over nearly ten years, all these so-called "college greenbacks" were paid by state appropriations. As the orders drew interest at seven per cent, the total amount finally paid was more than \$40,000. The initial issuance of these orders in 1870 injured the business reputation of the officers involved.

In 1871 the College received as its sole state appropriation, \$2,700 toward payment of salaries. In 1872, \$15,000 was appropriated "To fence, improve, and stock the state farm, and to develop the agricultural department of said college." The Board of Regents appropriated \$5,000 of this to the erection of one wing of a barn.

The legislature of 1873, which passed an act reorganizing the Board of Regents of the College, also appropriated \$8,000 for completion of the barn, and \$15,000 to "Improve and stock the state farm and develop the agricultural department ***."

The statement of these details seemed necessary in order that the reader may see the wholly inadequate character of the support given to the College by the state. It was not until 1867 that any appropriation was made for agricultural purposes, and the reports of department heads and the Board of Regents show that this was used effectively in fencing the farm, bringing land under the plow, and planting forest and fruit trees, and vegetables. Work with farm crops was enlarged from year to year after it was made possible by fencing.

CONTROVERSY CONCERNING SCOPE OF THE COLLEGE

From certain quarters the management of the College had received active criticism for some years. It was alleged that it was not fulfilling the purpose of the organic act and, on the contrary, was devoting itself to instruction in Latin and Greek. Instruction in Greek was discontinued in the spring of 1872, but Latin continued to be a subject of controversy. On the one hand were those who believed that there should be no instruction in the classic languages and that the education should be strictly that which farmers should receive. There was little unity of view in respect to what that education should include. Some believed that actual farming should be taught. Others, relying upon the language of the Morrill Act, held that the institution should "teach such branches of learning as are *related to* agriculture and the mechanic arts" rather than the actual practice of agriculture.

On the other hand were those who believed that the Morrill Act, in its provision, "without excluding other scientific and classical studies," expressed a requirement that such studies must be taught, and that in so far as they were excluded, the intent of the act was being violated. These seemed also to hold the view that branches of learning related to agriculture were to be taught rather than practical farming.

The views of this group were published in two letters printed in the *Topeka Commonwealth*, February 2, 1872, and March 24, 1872, respectively. These letters were signed "L" and were written by Prof. J. H. Lee, who was at that time professor of Latin and English literature. In these letters Professor Lee complained bitterly of the suppression of Greek in the College and of the slight attention to Latin which he was able to give and for which there was no other teacher. He cited the heavy expenditures which had been made in the interests of agriculture as being out of proportion to those made for other subjects. He presented this development in detail. Thus, while one faction contended that agriculture was practically ignored, the other was equally positive that the obligations of the state were being violated by the exclusion of classical studies, or insufficient provision for them.

A reading of newspapers current at that time leaves one with the conviction that political ambitions and newspaper and neighborhood jealousies were not insignificant factors in the controversy. The *Junction City Union* was very pungent in its characterizations of conditions in Manhattan and at the College. Rev. John A. Anderson, later president of the College, is credited with doing editorial writing for the *Union*, and it would be interesting to know whether he wrote any of the editorials of that character. At this time it is difficult to evaluate accurately the several forces in contention concerning the College.

A NEW BOARD OF REGENTS ACTS

In 1873 the legislature passed a law reorganizing the Boards of Regents of all of the state educational institutions, and the new Board for this College called for the resignations of all members of the faculty, June 27, 1873. Members of the faculty, under protest, submitted their resignations, but all excepting President Denison were re-elected.

The Board of Regents unanimously adopted the following resolution concerning Doctor Denison:

"Whereas, by the resignation of Dr. Denison and the withdrawal of his name for re-election to the presidency of this insti-

tution, his connection seems permanently severed with the same, therefore

"Resolved, by this Board that we fully appreciate the debt of gratitude due from the State to him for the long and able service and unswerving devotion to the interests of the College in the discharge of duties under the most trying and difficult circumstances."

PRESIDENT DENISON'S SERVICE

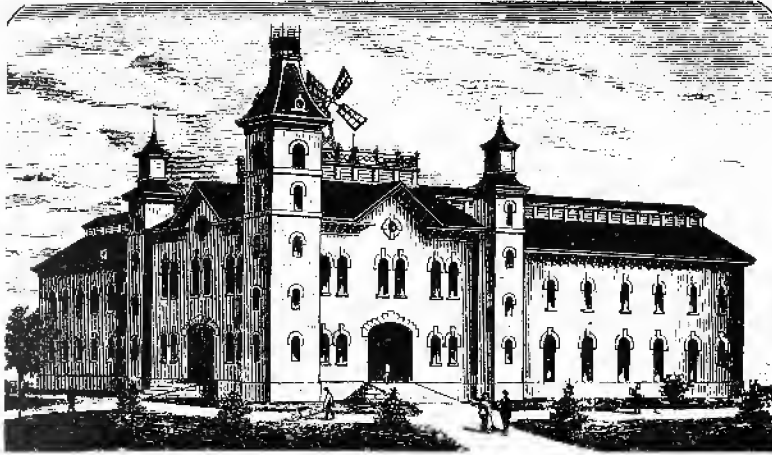
It is hardly possible for the present generation to visualize the "trying and difficult circumstances" under which President Denison and his colleagues worked. With scarcely any money and little equipment at first, and with very niggardly support by the State up to nearly the end of his administration, it would seem that President Denison and his faculty should be heartily commended for what they did, rather than criticised for what they did not do. The College served an important function during his administration in giving young people of the State education that helped them in all of the duties of life and at a minimum expense. Many of these became teachers in the common schools of the young State and thus spread the benefits of the College. As much work in agriculture was done as the financial support of the State and limited number of qualified agriculturists permitted, and observations were made and experiments conducted which were of real value in the development of the State.

BUILDINGS AND OTHER IMPROVEMENTS

During President Denison's administration a boardinghouse was provided which, while of much service to the College, became the occasion of considerable financial loss to Doctor Denison. In 1871 the township of Manhattan voted bonds in the amount of \$12,000 for use in the purchase of the college farm near the town, which is now the campus. On this farm one wing of an ambitiously planned barn was built in 1872. A description of this barn, with illustrations, was published in the report of the State Board of Agriculture for 1872. In its incomplete state it lacked greatly in serviceability, but was used as the barn until 1875, when it was remodeled and became the chief college building for a time. It has served many purposes and is still (1939) in use, being designated as Farm Machinery Hall.

The administration also transmitted to its successors valuable plantations of fruit and forest trees and shrubbery, geological collections, a library, and philosophical apparatus of significant value. There was also considerable farm machinery and other equipment.

A residence for the agriculturist at an expense of \$2,650 was provided by the legislatures of 1867-1869. The building was occupied by Professor Hougham from 1868 to 1871. Major Miller,



FIRST STONE BARN AS PLANNED

This cut illustrates the college barn as planned in 1872. Only one wing, shown in part at the left, was erected. It has served many purposes and is now Farm Machinery Hall. The cut is reproduced from one in the Transactions of the Kansas State Board of Agriculture for 1872.

being unmarried when he came to the College, did not use it, and it was rented to Professor Mudge, who resided there from March, 1872, to April, 1874.

INDUSTRIAL WORK AND ENROLLMENT

Compulsory manual labor by male students was introduced the spring of 1870, but the compulsory feature seems to have been relaxed to a certain degree following opposition by students. Student labor was prominent, however, in agricultural, horticultural, veterinary, and mechanical lines, and was paid at the rate of three to fifteen cents an hour depending upon its value to the College. Young women also participated in this work to a certain extent. The introduction of instruction in printing, telegraphy, and domestic economy was anticipated, but the cost of equipment and personnel for industrial training was recognized as significant.

During the first ten years of the College the enrollment for successive school years, beginning with 1863-64, was: 106, 114, 128, 142, 115, 160, 142, 145, 168, and 173. There were only fifteen graduated within the period—five in 1867, five in 1871, three in 1872, and two in 1873.

FARMERS' INSTITUTES

An important development initiated by the Denison administration was the inauguration of meetings designated as "farmers' institutes." A history of this movement was prepared for the United States Department of Agriculture by J. T. Willard, and somewhat extensive parts of this were published in the *Industrialist*, Vol. 32 (1905-06), pp. 131-136, 147-151, and 179-183. As these articles are available for consultation, only the salient points will be presented here.

The Union Agricultural Society was organized June 6, 1868, with Prof. J. S. Hougham as president and Regent Elbridge Gale, a resident of Manhattan, as secretary. The directors were from Riley, Wabaunsee, and Clay counties. The society planned to meet on the second Saturday of each month.

The Board of Regents, being in session June 23, 1868, on the suggestion of Regent Gale passed resolutions requesting members of the faculty to visit the more populous parts of the state, and, by lectures on agricultural subjects and free conversation, to disseminate information on correct agricultural principles, and the aims and character of the State Agricultural College. Regent Gale introduced the name "farmers' institutes" for such meetings, and this is believed to be the first use of the term anywhere.

November 7, 1868, the Union Agricultural Society announced that a farmers' institute would be held in connection with its next regular meeting in the County Hall, November 14, 1868. At this meeting in Manhattan, held in two sessions, President Denison gave an address on "The Relation of the College to the Agricultural Interests of the State," Prof. B. F. Mudge lectured on "Tree Borers," Regent Gale, on "Forest Tree Culture," and Professor Hougham, on "Economy of the Farm." These were spiritedly discussed by several others of those present, and Geo. T. Anthony, editor of the *Kansas Farmer*, "made one of those finished and magnetic speeches which so few know how to make." A full account of the meeting was published in the *Manhattan Standard*, December 5, 1868, and the *Kansas Farmer* gave eight columns to Captain Anthony's report of it.

The second farmers' institute was held at Wabaunsee, Friday evening and Saturday morning, November 20 and 21, 1868. The same representatives of the College seem to have participated.

An institute was held at Manhattan in January, 1869, and each winter thereafter for several years, and statewide attendance was invited. The one held in 1870 extended through four days. For the institute of 1871 four paid speakers, C. V. Riley, Wm. Muir,

Joseph Bushman, and Dr. W. H. Howsley, were present. For that of 1872, President A. S. Welch of Iowa Agricultural College, Dr. John A. Warder of Ohio, Prof. C. V. Riley, and others gave lectures. In 1873, also, distinguished out-of-town speakers were participants. Within this period a few institutes were held at other points than the College.

In the fall of 1873, under the Anderson administration, arrangements were made for an institute which was held the first week in February, 1874. Several distinguished speakers were present. Occasion was taken by some of the local men to attack the new administration, but serious disturbance was avoided. In December, 1874, the Board of Regents discussed the feasibility of holding an institute, but the matter was referred to the executive committee, where it received no favorable attention.

The Bluemont Farmers Club was organized January 31, 1873, and held weekly meetings for some time, and with intervals of more or less inactivity, survived for several years. Its leading spirit was Washington Marlatt, a prominent farmer of the college neighborhood. The annual farmers' institute under the auspices of the College having been abandoned, this club fostered local institutes beginning with the winter of 1876. At the institute held February 8, 9, and 10, 1876, several members of the faculty and of the Board of Regents were on the program as reported in the *Nationalist*.

In January, 1877, the Farmers Institute was organized on a basis independent of the Bluemont Farmers Club, and subsequent local institutes were held for some years under that organization.



JOHN A. ANDERSON

Political economy, 1873-1878. President, 1873-1879.

CHAPTER IV

THE ADMINISTRATION OF JOHN ALEXANDER ANDERSON

SEPTEMBER 1, 1873, TO SEPTEMBER 1, 1879

REV. John A. Anderson was the pastor of the Presbyterian Church at Junction City, Kansas, from February, 1868, to the fall of 1873. George W. Martin, publisher of the *Junction City Union*, was a member of his congregation and a warm admirer of him. This paper was active in its criticism of the management of Kansas State Agricultural College. When the Board of Regents which took office April 1, 1873, had under consideration the choice of a successor to President Denison, Regent Adams moved, July 29, "that the chair of president of K. S. A. C. be tendered to the Rev. John A. Anderson, of Junction City, at a salary of \$2,500 per annum. Regent Copley seconded the motion. Regent Hudson nominated the Hon. Geo. T. Anthony for the position." At a later session the same day, Regent Copley moved "that Mr. John A. Anderson be invited to meet the Board of Regents at Manhattan." The next morning, July 30, 1873, "Rev. Mr. Anderson, according to invitation, met the Board of Regents when a general discussion was held on the subject of industrial education."

"Regent Adams called up his resolution (laid over July 29) that the chair of president be tendered to Rev. John A. Anderson, Junction City, Kansas. Upon a call of the roll *** a majority having voted 'aye,' the resolution was adopted and John A. Anderson declared elected president of the Kansas State Agricultural College from the first day of September, 1873."

The election of Mr. Anderson to the presidency of the College was well-received by the residents of Manhattan, and comments published in the local and state newspapers were favorable. The somewhat prevalent belief that he and his ideas were the causes of immediate bitter controversy is without foundation. All serious friction was of later development.

POLICY OF THE BOARD

President Anderson took up the duties of his office with energy and with the unanimous and hearty support of the Board of Regents. At a meeting held September 3, 1873, a preamble and resolutions were adopted as follows:

For the purpose of defining the policy of the Board of

Regents and as a guide to the faculty in preparing a new curriculum, therefore Resolved

1. The object of this institution is to impart a liberal and practical education to those who desire to qualify themselves for the actual practice of agriculture, the mechanic trades, or industrial arts. Prominence shall be given to agriculture and these arts in the proportion that they are severally followed in the State of Kansas.

Prominence shall be given to the several branches of learning which relate to agriculture and the mechanic arts according to the directness and value of their relation.

Upon this basis, the faculty are requested to submit to the Board of Regents, three (3) courses of study, each requiring four (4) years for its completion: The first to be especially designed for those who wish to become farmers; the second for those who desire to become mechanics or industrial artizans; and the third chiefly for young ladies, that they may be prepared to earn an honorable self support and to adorn the highest stations of life.

Degrees shall only be given to graduates; yet the faculty are requested to indicate what studies would, in their opinion, be best for pupils who can spend but one, two, or three years in either of the above departments.

Thorough instruction shall be given in the English language. Neither Latin, German, nor French will be required as a part of either the full or partial courses, but shall be optional with the pupil or parent.

The ideas expressed in these resolutions are in such complete accord with later discussions by President Anderson that it seems probable that he wrote them for the Board.

September 4, the following resolution was adopted:

Resolved, That the study of Latin, German, or French be optional with the student, parent, or guardian from this date, provided the student adopt such study in the place of these languages as the faculty may direct.

The following resolution was also adopted:

Resolved, That an appropriation not to exceed \$2,000.00 be hereby made for the equipment of such shops and offices as the executive committee may deem necessary for the instruction of agricultural and other students in the mechanical and the industrial arts.

INDUSTRIAL WORK ENLARGED

No catalogue was issued for the college year 1872-73. Information concerning the college was given by means of a few circulars. One of these set forth the policy of the new Board of Regents. The annual report of the College for the year ending November 30, 1873, three months after President Anderson assumed office, shows that the administration entered with vigor upon the new program. Industrial work in agriculture and horticulture and in the mechanical department, which had been inaugurated by the preceding administration, was continued. Instruction in telegraphy and printing had been introduced. The report states that "Mrs. H. C. Cheseldine was employed as superintendent early in December, and classes have been formed in sewing, dress-making, and millinery. Sewing machines will be in readiness at the opening of next term." The statistics concerning classes showed an enrollment of twelve in dressmaking, fifty-four in telegraphy, thirty-seven in printing, thirty-five in carpentry, ten in blacksmithing, five in painting, and six in wagon making. President Anderson also included a somewhat extended statement of his interpretation of the purposes of the organic act.

The new administration apparently moved along smoothly. The requirement of daily manual labor of some kind by each student seems to have been accepted in good spirit by the faculty. President Anderson was absent from the College a good deal, as he had not moved his family from Junction City, and his residence in Manhattan was a room in the Adams House. He was said to have engaged in political activities preceding the election of the United States Senator by the legislature, but at this date this assertion cannot be tested. The College was considerably in debt when he took charge, and this indebtedness increased. Payment of salaries of the members of the faculty was far in arrears, and some were disposed to blame the new Board of Regents for this situation.

OPPOSITION TO THE BOARD

The appointments of members of the Board in April, 1873, made under the provisions of the new law, had not been confirmed by the senate, as the legislature was not in session at that time. Governor Osborn sent in their names for confirmation January 16, 1874, and this was made a special order for January 23. Dr. H. J. Detmers, Prof. B. F. Mudge, and Prof. Fred E. Miller went to Topeka on the twenty-third, and worked upon members of the senate to defeat the confirmation of the appointments, and especially that of Major N. A. Adams. They failed in this, although,

according to Dr. Detmers, by only one vote. President Anderson was absent from the College when these professors went to Topeka.

FACULTY MEMBERS DISCHARGED

The Board of Regents met in Manhattan, February 6, 1874, pursuant to adjournment. After transacting some other business, it went into executive session and took this action:

The following preamble and resolution was offered:

Whereas, B. F. Mudge, professor of geology and zoology; Fred E. Miller, professor of practical agriculture and superintendent of farms; and H. J. Detmers, professor of veterinary science; of the Kansas State Agricultural College, have been guilty of insubordination and gross misconduct,

Resolved, That they are hereby dismissed from their respective chairs in the State Agricultural College, their dismissal to take effect February 7, 1874. The resolution was unanimously adopted and the secretary instructed to furnish each of the above-named professors with a copy of the same.

This action of the Board aroused severe condemnation by friends of the deposed men, especially in respect to Professor Mudge. Meetings of students were held, and a few weeks later they gave Professor Mudge a fine watch as evidence of their esteem. He had been on the faculty longer than anyone excepting Professor Platt, and was a competent and much loved teacher and highly respected as a citizen. The other men had been at the College for shorter periods, and did not have as large personal followings.

Looking at this event in the light of the present, it must be held that the protesting professors were in error in attempting to thwart their employers, the Board of Regents. On the other hand their summary dismissal was unnecessary and weakened the morale of the faculty, and the estimation in which the new president was held by a large number of persons whose approval was worth having. The action looks more like the blow of a politician than the considered decision of a minister and an educator. It may have been an act of the Board rather than of the president.

As affecting the work of the College, it may be noted that a professor of veterinary medicine was not employed again until 1888, and the relative importance of instruction in geology has never been regained. Mr. E. M. Shelton was chosen to succeed Major Miller as professor of agriculture, and was one of the ablest members of the faculty up to his resignation in 1890.*

*Doctor Denison in a letter to Professor Walters stated that he suggested the election of Mr. Shelton.

ANDERSON'S EDUCATIONAL OBJECTIVES

President Anderson's report for the year 1874 consists of the following paragraph:

The work of changing this institution from one giving a professional education to one giving an industrial education, as directed by you, has progressed more in the last twelve months than I had expected in twenty-four. With needed room the full success and practical value of your policy would be very speedily demonstrated.

President Anderson's educational ideas were set forth at length in the "Hand-Book of the Kansas State Agricultural College." This was the College catalogue printed in 1874 and gives a list of the students enrolled from September 11, 1873, to December 18, 1874. Sixty-five pages of the Hand-Book were given to President Anderson's discussion of the policy of the Board of Regents, and the course of study. It is impossible to state briefly, and at the same time adequately, President Anderson's arguments. Quotations have frequently been made from that article, but choice has usually been given to parts which are almost uncouth in their diction. President Anderson, in general, wrote with force and vigor, but, at the same time, with due attention to literary quality. Occasionally in both writing and speaking, he used comparisons and illustrations that attracted attention because of their unconventionality.

No one can read the Hand-Book without becoming convinced that President Anderson believed that the object of the Morrill Act was to endow institutions which should teach young men in the elements of practical farming, blacksmithing, wood-working, stone-cutting, etc. Education in engineering was in a very elementary state everywhere at that time, and apparently President Anderson had no plan for entering that field.

While President Anderson could deal rather cogently with education of young men in lines designed to prepare them for earning a living in farming or one of the industrial arts, he was less successful in writing upon the education of young women. He discussed the subject at great length. He had very little to suggest for the education of young women aside from that designed to enhance their qualifications for homemaking. The typewriter and the calculating machine had not yet come into use, and the large place now filled by women in office work was not foreseen by him. The president regretted the fact that thousands of women barely made a living by the most assiduous use of the needle, but his suggestion of other occupations for them can hardly be regarded as of

general application in avoiding that condition. He doubtless expected that only a few women would be gainfully employed outside their homes.

CURRICULA

The Hand-Book gives an outline of three curricula—farmer's, mechanic's, and woman's. These were six years in length instead of four years as requested by the Board of Regents. The work of the first two years corresponded in a general way to that designated as for the preparatory year under his predecessor. A biennial catalogue was issued for the calendar years 1875-77. This catalogue and the Hand-Book were the only ones issued by President Anderson. In the biennial catalogue the curricula are reduced to two, each four years in length, and entitled farmer's course and woman's course. The curricula in force throughout this administration provided that each student, each term, should have training for at least five 45-minute periods, net, a week, in an "industrial," which he might choose, or which would be designated by the president.

Four-year courses were presented to the Board by President Anderson without conference with the faculty, and were adopted May 31, 1877. They were printed in the *Industrialist*, June 2, 1877. Several influential members of the faculty were strongly opposed to the reduction of the curricula from six years to four years in length and talked with members of the Board of Regents about it. This resulted in another meeting of the Board on July 10, 1877. President Anderson was in Colorado on vacation but returned for the meeting. A joint session of the Board and the faculty was held, beginning at 8:00 o'clock a. m., July 11. A second session convened at 2:00 p. m., and a third at 8:00 p. m. As a result of this prolonged conference, several changes were made in the curricula adopted May 31, 1877, and the final formulations were printed in the *Industrialist* for August 11, 1877, and in the biennial catalogue for 1875-77.

Although objectors were successful in modifying the curricula to some extent, the main feature of reduction in length from six years to four years was retained. On this general characteristic, President Anderson wrote in the *Industrialist*, "the reduction of the course of study of the Kansas State Agricultural College to four years, beginning at the point to which the average district school will carry the pupil, brings an agricultural education still closer to the people, and places it yet more surely within the reach of those boys who have to earn their way by the labor of their hands."

It will be seen that the reduction suffered by the curricula must have been chiefly in the more advanced subjects.

The biennial catalogue 1875-77 probably records the high-water mark in respect to the industrial departments. The list for male students included "the farm, the nursery, carpentry, cabinet-making, turning, wagon-making, painting, and blacksmithing." For female students there were provided "dressmaking, printing, telegraphy, scroll sawing, carving, engraving, photography, and instrumental music." Young men were permitted to take printing or telegraphy but were charged one dollar per month for the use of material and instruments.

No specific curriculum was offered for those interested in mechanic arts. President Anderson defended this in the catalogue by contending: "1. This knowledge (that of the farmer's course) is of more practical value to the mechanic than is the Latin, Greek, or a half-dozen other things usually embraced in the course preparatory to the professions; 2. That the great majority of Kansas mechanics will also be more or less engaged in agriculture; 3. That those studies in the course which are directly valuable to the mechanic, together with the shop facilities, offer a better mechanic's education than can be elsewhere found west of the Alleghenies." It is evident that President Anderson had no conception of the institution as one in which preparation for engineering should be provided.

HANDICAPS TO INDUSTRIAL TRAINING

The additional industrial features introduced by President Anderson were presented under considerable handicaps for the first two years. Instruction in woodwork was given in a building 18 x 36 feet in size, which was constructed in 1870 for use as a barn and toolhouse, and had also been used by Doctor Detmers for his veterinary clinics. By November, 1873, eleven workbenches were fitted up, and twenty-five individual sets of tools were available, with one set used in common. Thirty-five students were enrolled.

Blacksmithing and wagon-making were taught in a 20 x 40-foot building erected in 1872 for shop purposes, and located near the boardinghouse. Ten were enrolled for blacksmithing and six for wagon-making. Five students were reported as taking painting. Sewing, printing, and telegraphy were taught at first in the chapel of the College building, which also continued to be used for instruction in instrumental music. In the spring of 1874 printing and telegraphy were transferred to the residence vacated by Pro-

fessor Mudge. This was the one built for the agriculturist in 1868. Very soon after, printing and telegraphy were transferred to the old Platt residence south of the College.

THE BARN BECOMES THE COLLEGE

Judging by newspaper accounts, the efforts in industrial training met with commendable success in spite of untoward conditions, but President Anderson had a vision of much better things. The rural location of the College building was a perennial drawback



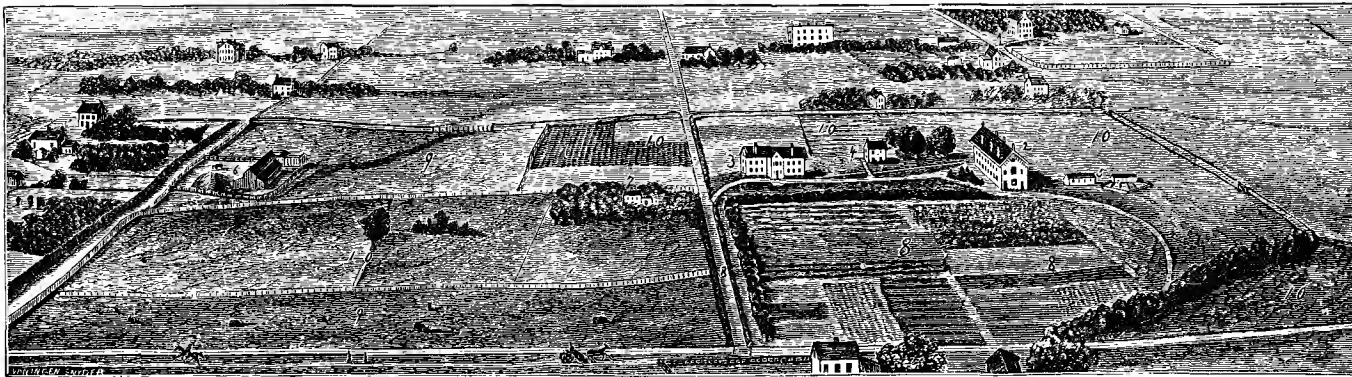
INDUSTRIAL WORKSHOP

Woodshop as originally built. The view shows at the left miscellaneous sheds erected by the faculty to protect their horses and buggies, and at the right, part of the blacksmith shop, and also the structure erected as one wing of a barn and used for College classes from 1875, now Farm Machinery Hall. The date of this view is about 1885.

that was obviated only to a definitely limited extent by the provision of a boardinghouse. Both the College building and the boardinghouse were of rather inferior workmanship. At the same time, on the new College farm, adjoining the townsite of Manhattan, a wing of a fine stone barn, erected in 1873, provided better quarters for the cattle than those enjoyed by the students on the old farm.

President Anderson obtained from the legislature of 1875 an appropriation of \$7,500 for an industrial workshop and equipment, and April 5, 1875, the Board of Regents instructed its executive committee to spend \$2,500, or so much thereof as might be necessary, to remodel the barn into an "Industrial Hall." The *Industrialist*, started that spring, and published through the summer, gave week by week all the details of the remodeling of the barn, and the construction of the workshop.

The blacksmith shop was moved in the summer of 1876 from



THE COLLEGE CAMPUS AND FARM 1875

Reproduction of a view printed in the Fourth Annual Report of the State Board of Agriculture 1875. This quaint picture, while very inaccurate as to perspective, and in respect to two of the residences which are shown on the wrong side of the road in the upper left background, is very interesting because it is the only one extant which shows the temporary housing provided for animals after the first stone barn was taken and used for College classes in 1875. The numbered items are: 1, Old College building. 2, First barn transformed to College building. 3, Building for industrial arts. 4, President's residence. 5, Piggery. 6, Yard and temporary stables for stock. 7, Farm house. 8, Nursery. 9, Pasture. 10, Cultivated land. The large unnumbered building to the rear represents the boardinghouse but on much too large a scale. Other buildings shown are private residences.

near the boardinghouse to a point about fifty feet north of the industrial workshop on the new campus, where it fulfilled its purpose inadequately until 1892.

THE SECOND STONE BARN

The cattle removed from their accustomed quarters were housed in a "comfortable shed 100 x 30 feet, well provided with stalls, box stalls, granaries, etc." This was near the southwest corner of



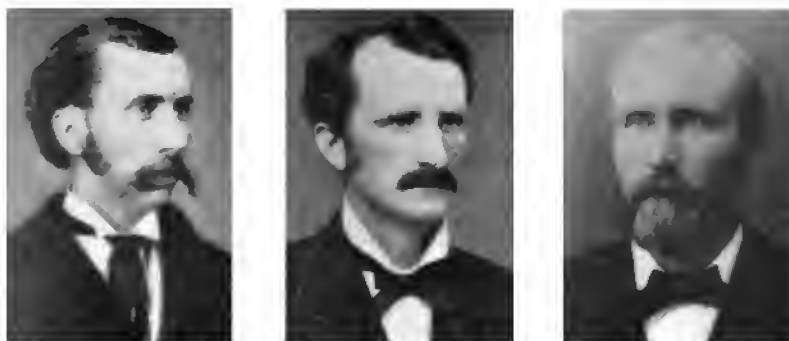
CHEMISTRY BUILDING 1876

Chemistry building as erected in 1876. This shows the two doors on the front side and the windows in the east wing. The interior of this building was destroyed by fire in 1900 and rebuilt as a women's gymnasium. At that time the doors referred to were walled up, and a door placed in the east wing. In 1911 the interior was remodeled for the chemistry department and used by it until 1939, when the interior was entirely rebuilt and additional windows placed at certain points to adapt it to the use of the department of mathematics.

the campus, near the present site of the athletic field. The *Industrialist* states that "upon the new site water in abundance is found, and altogether the new building will be more convenient and comfortable than the old." However, before long the need of a good stone barn began to be presented, and by continued efforts an appropriation of \$4,000 was obtained in 1877 and the building finished in October, 1877. This stood on a site northeast of the ground now occupied by the north end of the east wing of Waters Hall. This barn was damaged by a windstorm and razed in 1914. The materials salvaged were used in the animal husbandry barn to the north.

COLLEGE WORK TRANSFERRED TO PRESENT CAMPUS

Most of the work of the College was transferred to the new campus the summer of 1875 and handled with much greater satisfaction. The need of more room was imperative, and public approval of the administration was such that in 1876 an appropriation of \$4,000 was made for a building for horticulture and associated subjects, and one of \$8,000 for a chemical laboratory. The plan of the latter building was the result of a study by Prof. W. K. Kedzie of many European laboratories which he visited at



Left—W. K. Kedzie, chemistry and physics, 1873-1878. Center—E. M. Shelton, agriculture, 1874-1890. Right—M. L. Ward, mathematics and English, 1873-1883.

his own expense. He made drawings which were modified and put in architectural form by Mr. E. T. Carr of Leavenworth, and the description of the finished building printed in the *Industrialist* concludes as follows: "To students desiring to avail themselves of every modern facility in chemical work and study, this laboratory can be safely offered as second to none in the whole West." The men of that day were not shrinking violets.

In 1877 the legislature appropriated \$12,500 to build the north wing of the building later named Anderson Hall. This wing was designated in the law as Practical Agricultural Building. Its construction began in March, 1878, and was completed in January, 1879, just as President Anderson was closing his connection with the College. It was the first good building erected on the campus. Mr. E. T. Carr was the architect.

INDUSTRIALIST ESTABLISHED

One of the most valuable accomplishments of President Anderson was the establishment of the *Industrialist*. The first number

was dated April 24, 1875. The purpose in view was well stated in one of the paragraphs of the "Salutatory," which reads:

"So far from trenching upon the ground occupied by the journals of Kansas, it proposes to pre-empt unclaimed land and make



CAMPUS IN 1877

Reproduction of a view published in the catalogue for 1875-77. It was made from a drawing which represented the buildings with a good degree of fidelity. The roads were entirely different.

a field of its own. It is issued, in part, to afford the members of the printing classes of the Agricultural College regular drill in the work of printing and publishing a weekly newspaper; in part, to epitomize current events for the benefit of its student readers; in part, to photograph the work of the several departments of the Agricultural College, for the information of its patrons and the people; in part, to discuss the educational system and methods of Kansas from the stand-point of the rights and necessities of the industrial classes; and, in part, to contribute, so far as it can, such practical facts of science as may increase the profit or pleasure of the farmers, mechanics, or business men or women of Kansas. In other words, the *Industrialist* proposes to say and do those things which may properly and naturally be said or done by persons engaged in daily routine of an Institution created by the Nation, and guided by the State, 'to promote the liberal and practical education of the industrial classes in their several pursuits'."

The paper has been issued continuously since its beginning; and while its functions have not been uniform throughout its more than sixty years of life, it has always been at hand as a channel for communication between the administration and the public. The columns of its early volumes are vivid with the incisive writing of President Anderson. Its files are invaluable as a repository of authentic College history.

ANDERSON RESIGNS TO ENTER CONGRESS

The *Industrialist* was sent to all newspapers published in Kansas and to members of the legislature, and President Anderson was a member of the Kansas Editorial Association. He also prepared



THE FIRST HOME OF THE INDUSTRIALIST

This building shows the "Old Patt Residence," which was used by the departments of printing and telegraphy in 1874-75. The first six numbers of the *Industrialist* were printed on the first floor of this building. This residence has been changed somewhat at the rear. The building stands at the southwest corner of the intersection the northwest corner of which is the old College farm now used by the department of horticulture.

a lecture on "Kansas" which was delivered in a number of towns of the State. By these and other means, he became widely known, and his virile writing and effective speaking evidently made a favorable appeal to the public. In the summer of 1878, his friends entered him in a race for the nomination to be Congressman from the First District. He was nominated in August, made a vigorous campaign for election, and received more than twice as many votes as his chief competitor. He declined to draw any salary from the College during the forty-six days of the campaign, and drew none afterward when he was not at the College. He designated Prof. M. L. Ward to be acting president in his absence. He resigned February 1, 1879, the action to be effective on the election of his successor. September 4, the Board accepted it, effective September 1, 1879, and adopted resolutions expressive of appreciation of his character, ability, and service to the College in "the inauguration of a policy which now promises certainly to provide for its patrons an education commensurate with the wants and needs of the youth of a young and growing commonwealth."

CHIEF FEATURES OF ANDERSON'S WORK FOR THE COLLEGE

The administration of President Anderson was characterized by its emphasis upon the practical handwork of farmers, home makers, and several types of mechanics, its elimination of remaining vestiges of the teaching of Latin, and its reduction of the re-



RESIDENCE OF THE PRESIDENT, 1875 TO 1885

This building was erected by the widow of Prof. N. O. Preston in 1866. After the academic work of the College was transferred to the present campus in 1875, it was occupied by President Anderson as a residence. Later it was used as such by President Fairchild and Professors Shelton, Georgeson, Cottrell, and Otis, and by Custodian Lewis. In 1920 it was enlarged to the west and converted into the college hospital.

quirements for graduation to four years, instead of six, beyond the common schools. The last feature was of questionable value as seen in the light of subsequent decades. It made possible a larger number of graduates, but at the expense of occupying a distinctly inferior academic standing which was not completely overcome for nearly forty years.

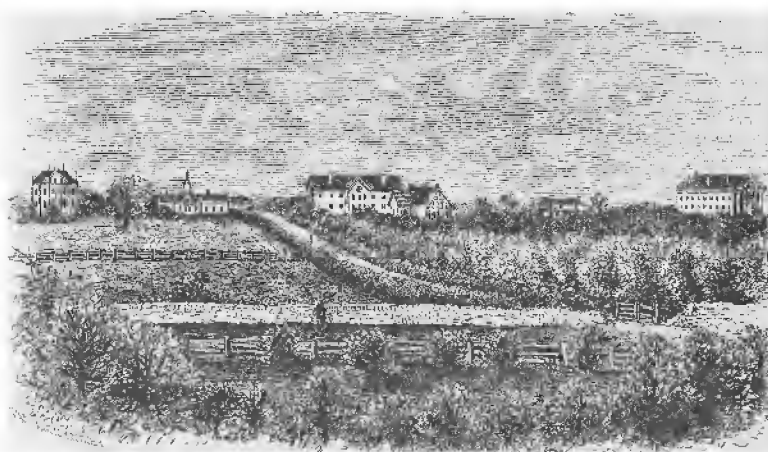
The physical plant was materially developed. The building used for woodwork, printing, telegraphy, household arts, and music was erected. This is still a part of the structures used by the department of shop practice. Instruction in chemistry received a great impetus including provision of a laboratory that was very fine for the time, and with much transformation after its destruction by fire in 1900, was again used from 1911 to 1939 by the department of chemistry as Chemistry Annex No. 1. A building used for instruction in horticulture, entomology, botany, and zoology was also erected. This building now houses the department of illustra-

tions and the College organizations maintained by some of the local churches. The barn provided in 1873 was appropriated to academic purposes, and after two years of cheap housing, a new barn was provided in 1877 for herds of fine stock which had been acquired by purchase and production. The farm and horticultural work had been continued and enlarged, though still leaving much for the future. Considerable extension of experimental investigation in these lines had taken place.

An appropriation for the erection of the first wing of the main College building, Anderson Hall, was obtained and the building completed just as President Anderson was leaving for Washington.

Through public speaking and the *Industrialist*, and the publicity contributed by friends, the College had been brought into nearly universal approval. Even the advocates of the classics had ceased their attacks.

The enrollment of students in the successive years of the administration of President Anderson, beginning with 1873-74, was



THE CAMPUS 1878

Reproduction of a view of the campus published in the First Biennial Report of the State Board of Agriculture 1877-1878. From a photograph taken from the top of the residence of Rev. E. Gale to the east.

184, 143, 238, 232, 152, and 214. The numbers graduated the same years were five, two, five, nine, four, and nine.

In his relations with students, President Anderson was informal and sympathetic. One of those of his day, still living (1939), characterizes him as "perfectly grand," and states that all the students liked him. His attitude is disclosed in part by his replacing,

in the College catalogue, the ten rules previously printed, by the following:

1. Behave as a true man or woman should, at all times and in all places.
2. Attend to your own business promptly, thoroughly, and courteously; and vigorously let alone that of other people.
3. Penalty: "Leave!"

However, the catalogue also contained a statement that "unless otherwise directed by parents, students are required to attend chapel at 8:30 a. m., on academic days, and divine service once every Sabbath, either in the College or elsewhere." This was followed by an excellent explanatory paragraph.

FACULTY CHANGES UNDER ANDERSON

Changes in the Faculty were rather noticeable during the Anderson administration. When President Anderson took office, the Faculty included:

B. F. Mudge, Professor of Natural Science
 J. H. Lee, Professor of English Literature
 Fred E. Miller, Professor of Practical Agriculture and
 Superintendent of the Farm
 Elbridge Gale, Professor of Horticulture and Superinten-
 dent of the Nursery
 Wm. K. Kedzie, Professor of Chemistry and Physics
 M. L. Ward, Professor of Mathematics
 J. S. Whitman, Professor of Botany and Entomology
 J. E. Platt, Professor of Elementary English and Mathematics
 Dr. H. J. Detmers, Professor of Veterinary Science
 Mrs. Hattie V. Werden, Instructor in Instrumental Music
 Ambrose Todd, Steward, and Superintendent of the Me-
 chanical Department

Professors Kedzie, Ward, and Whitman were new appointees; the others had served one or more years. The separation of Professors Detmers, Miller, and Mudge has been described, and the appointment of Prof. E. M. Shelton. The circumstances attending the appointment or the withdrawal of others are not so well known.

In December, 1873, Mrs. Hattie C. Cheseldine was employed as Superintendent of the Sewing Department. She was succeeded August 26, 1875, by Mrs. Mary E. Cripps, who remained with the College until 1882.

Frank C. Jackson was Superintendent of the Telegraph De-

partment from December, 1873, to June, 1874. His successor was Walter C. Stewart, who served from September 1, 1874, to August, 1879. Ira D. Graham was elected to the position, September 4, 1879, and performed its duties to 1890, other responsibilities being added from time to time.



Right—J. S. Whitman, botany and entomology, 1873-1876. Center—Hattie C. Cheseldine, sewing and millinery, 1873-1875. Right—Mary E. Cripps, sewing and cooking, 1875-1882.

M. W. Schillerston, a student, was the first teacher of printing, beginning December 1, 1873. Albert A. Stewart was employed April 1, 1874, and remained superintendent of the printing department until October 1, 1881.

Prof. J. H. Lee declined to donate to the College his salary for June, July, and August, 1875, unless all members of the faculty were required to do so, and the secretary was instructed to notify him "that his services as professor in the Kansas Agricultural College will be dispensed with from and after the close of the present term." This was on April 6, but on May 27 the Board passed the following resolution:

It was resolved that in parting with Prof. J. H. Lee as a member of the Faculty of the institution, we desire to express our hearty appreciation of his fidelity, ability, and efficiency in the discharge of the several duties which have been imposed upon him during the past nine years of his connection with the Kansas State Agricultural College, and to assure him of our official and personal interest in his future welfare and happiness.

May 17, 1876, the Board of Regents adopted the following resolution:

That in order that more practical application shall be

had by the students of the Kansas State Agricultural College in the study of Botany, and that they may become more conversant with this science, in all its details, it is hereby ordered that Prof. E. Gale of the Horticultural Department have at the commencement of the new college year exclusive charge of the Botanical studies, and that the services of Prof. J. S. Whitman are dispensed with at the end of the preceding scholastic year.



Left—A. A. Stewart, printing, 1874-1881. Center—J. D. Walters, drawing and architecture, 1879-1929. Right—I. D. Graham, telegraphy, 1879-1890. Secretary of the College, 1881-1898. Assistant secretary of the Board of Regents, 1884-1898.

While connected with the Faculty, Prof. J. S. Whitman taught drawing as an extra subject. August 24, 1876, this work was taken up by Mrs. Ella Gale Kedzie, who was succeeded February 1, 1877, by John D. Walters. Professor Walters remained to develop the department until 1917, when he was given an *emeritus* status.

In May, 1877, Mrs. Werden married Mr. I. K. Perry, and Miss Carrie Steele was employed as her successor for the year 1877-78, but resigned because of insufficient remuneration, and W. L. Hofer was chosen to succeed her, and remained with the College until 1886.

At its meeting, May 23, 1878, the Board of Regents cut the salary budget from a total of \$14,700 a year, to \$12,000, "which necessitated some changes in the teaching force." The Board voted to dispense with the services of Ambrose Todd as Superintendent of the Mechanical Department after August 30, and elected Mr. T. T. Hawkes his successor. Mr. S. A. Hayes was made teacher of blacksmithing for the year 1878-79.

The Board also consolidated the departments of agriculture and

horticulture, and voted to terminate the employment of Professor Gale, August 30, 1878. However, within a short time it employed Mr. H. E. Van Deman to take the work and rank of Professor Gale. He served one year and was succeeded September 1, 1879, by Edwin A. Popenoe, who remained until 1897, and served another period later. It is of interest to note also, that Professor Gale was nominated by the National party for the position of Congressman, and made an unsuccessful race against President Anderson for that position in the fall of 1878.



Left—E. A. Popenoe, entomology, zoology, botany, and horticulture, 1879-1897; 1899-1907. Center—T. T. Hawkes, carpentry, 1878-1882; 1883-1886. Right—H. E. Van Deman, botany and horticulture, 1878-79.

In July, 1878, Professor Kedzie tendered his resignation. This was accepted by the Board to take effect September 1, in accordance with his request. He became professor of chemistry in Oberlin College. Although he had repeatedly received state-wide recognition in respect to his ability and service, the Board passed no resolutions of appreciation or of regret because of his going, and the only comment upon it in the *Industrialist* was an item reprinted from the *Nationalist*, as follows:

We regret very much to hear that Prof. Kedzie has resigned his professorship in the Agricultural College to take the chair of chemistry at Oberlin University. An enthusiastic scientist and a natural educator, he will be greatly missed. He is one of the kind of men an Institution should not be without when it can be avoided.

In a general reduction in the salary scale, Professor Kedzie's salary had been cut from \$2,000 to \$1,600 for the year 1878-79, and this may have determined his resignation. He had married Miss Ella M. Gale, a daughter of Professor Gale.

Mr. George H. Failyer was employed for one year to take the work of Professor Kedzie, and at the end of that time was elected to the professorship. Mr. Failyer was older than most of the stu-



G. H. Failyer
Chemistry, physics,
mineralogy and geology,
1878-1897.

dents who were being graduated at that period. He was a student assistant to Professor Kedzie for three years. His maturity and intellectual superiority had been manifest throughout his course. His connection with the faculty continued until June 30, 1897, and his service was characterized by hard work, sound thinking, sincerity, integrity, and frankness. He was one of the ablest men ever on the faculty and still retains (1939) an unimpaired intellect.

At the end of the administration of President Anderson only Professors J. E. Platt and M. L. Ward remained of those who had been elected to the faculty previous to his own election, and Professor Ward antedated him by only one day. Faculty tenure of office is thus seen to have been rather uncertain during this administration, but replacement officers were capable individuals.

FINANCES

The financial situation during this administration did not improve as much as had been expected. Though rather generous provision was made in respect to buildings, appropriations for salaries and other current expenses were meager. The expectation that the income from the endowment fund should meet current expenses maintained its repressing influence. In April, 1875, after conferring with the faculty, the Board voted to withhold the salaries for June, July, and August of all the members of the faculty except the president, Professor Kedzie, and Professor Shelton. This was objectionable to several and did not promote harmony. Other acts in the interest of economy were also necessary.

In 1877 the legislature voted that the interest on the endowment fund might be used for expenses to the extent of only \$15,000, until the debts of the College were paid in full, and all money advanced by the state had been refunded. It was, however, provided that this repayment might be made in the form of permanent improvements, but its use for erection or repair of buildings would have been illegal.

For a few years appropriations were made to pay as they matured the warrants issued in 1870, the so-called "college green-

backs," but the legislature of 1876 made no such provision. In 1877 the legislature required the Board to invest \$11,000 of the endowment fund in those warrants. It also required that \$5,000 of the endowment fund should be used to pay taxes that had been assessed against certain lands which the College had sold but to which it still held title, taxes upon which had not been paid by the purchasers. Both of these requirements were contrary to the provisions of the Morrill Act, but the Board complied with them under protest. Under continual pressure, the legislature finally in 1881 recognized the illegality of these requirements and restored the endowment fund by an appropriation of \$17,979.09.

ANDERSON AND EDUCATION AT THE COLLEGE

An appraisal of the value of President Anderson to the College is not a simple matter. His administration unquestionably removed permanently any tendency toward giving any prominence to study of ancient languages and their literatures. Even attention to modern languages as means of culture, or as media for making contact with scientific, agricultural, or industrial bodies of knowledge expressed in foreign tongues, received no support. His ideal was that of a trade school in which the objective was attainment of high efficiency in hand and machine work on the farm, or in shops or the household. As mechanical industries were in their infancy especially in Kansas, he concentrated on farming and home-making, with simple woodworking and iron working as adjuncts.

His career antedated the enormous development that modern science has made, as well as most of the inventions that are essential to present day life, and there can be no doubt that his attitude in respect to education would be quite different today from that which it was when he was president. Conditions in the state then were those of the frontier, and the industrial classes, including agriculture, needed assistance on simple subsistence lines. Subjection of adverse natural obstacles seemed more important than intelligent utilization of resources in the interest of conservation.

In Europe two distinct types of agricultural schools had been developed, one for the youth of the landholding upper-classes, in which subjects of importance in agricultural management were studied in connection with regular university courses; the other especially for the sons of the farmers who actually tilled and fertilized the soil, and fed and butchered the stock. In the American controversy concerning the place of the land-grant college in the educational system, some leaned toward one of these types, some toward the other. In this state the most convincing writers argued for the second type, although that was not the vision of Justin

Morrill, and with the assistance of other interests won their way to the radical reorganization for which President Anderson was employed.

It has remained for later educators here and elsewhere to develop a type of institution which is not a classical college nor a trade school, but one in which science, culture, and industrial arts



ANDERSON HALL

This building long designated as the Main College Building was named Anderson Hall in honor of Pres. John A. Anderson in 1902. The north wing, shown to the right, was completed in 1879, the central portion in 1882, and the south wing in 1884. It is used chiefly by administrative officers including the president, vice-president, registrar, dean of the Division of General Science, dean of the Division of College Extension, dean of women, secretary of the Y. M. C. A., and secretary of the Y. W. C. A. The business office and College post office are also located in it.

are blended in the production of a new type of education; one in which vocational efficiency in agricultural and mechanical industries is attained through intelligent application of the facts of modern science, while at the same time the individual as a person is developed in his physical, mental, and spiritual capacities to the end that life shall be much more than merely making a living.

President Anderson was a graduate of a classical school; he knew what he was doing, and his rugged disregard for the old-type college and its products may have been necessary to swing the College out of all ruts, and set it on a new plane where its destiny might be

charted by the use of new data and new criteria. If he was extreme, his errors were readily corrected. After his contest with the faculty in 1877, he may have felt that his work was done for the institution, and on that account been more than receptive to the opportunity to serve his state and the nation in Congress. His career there is not a part of this history, but it was one that was highly honorable, and in which he was always on the side of the great mass of the common people.

ACTING PRESIDENT WARD

Although officially the resignation of President Anderson was not effective until September 1, 1879, he had been present at the College in such an incomplete and broken manner during the fall of 1878, and not at all after March 15, 1879, that his serious work for the institution must be considered to have ended in 1878. During this last period Prof. M. L. Ward was the acting president in the absence of President Anderson. The position of any acting president is liable to be a trying one, as he must not only do that which his own judgment approves, but he must not do anything which he thinks that the one for whom he is acting would disapprove. Fortunately Professor Ward was in general sympathy with the policies of President Anderson, as various articles in the *Industrialist* of his authorship attest, and the interregnum was passed without serious inconvenience. After the election of the new president, Professor Shelton, who never was accused of overstatement in a commendation, wrote the following for the *Industrialist*:

With the arrival of President Fairchild, Prof. Ward's duties as acting President come to an end. During the nine months in which Prof. Ward has been the official head of the College, the Institution has gained in strength and prestige, both at home and abroad. Although the duties of the presidential office have been simply so much added to an already overworked teacher, yet this burden has been cheerfully borne; and our acting President has always found time to give kindly attention to the suggestions of his co-laborers in the Faculty and the wants of every student. We know that we speak the sentiments of every member of the Faculty, when we say that our intercourse with acting President Ward has been most pleasant and satisfactory.



GEORGE T. FAIRCHILD

Logic and political economy, 1879-1892; logic and philosophy, 1892-1897. President, 1879-1897.

CHAPTER V

THE ADMINISTRATION OF GEORGE THOMPSON FAIRCHILD

DECEMBER 1, 1879, TO JUNE 30, 1897

THE Board of Regents found it difficult to obtain a suitable successor to President John A. Anderson. There was no lack of men willing to serve, but satisfying the Board was a different matter. The Board voted that election of the president or other member of the faculty should require the affirmative vote of four. There were at least five candidates upon whom forty ballots were taken with no choice. At this juncture, well-founded tradition maintains, Prof. E. M. Shelton suggested the election of George T. Fairchild, vice-president and professor of English literature in the Michigan State Agricultural College. This suggestion appealed to a weary Board, and Professor Fairchild was elected September 4, 1879. He came out and looked over the situation from Friday, September 19, to Monday, the 22nd, and decided to accept the position. He began service December 1, 1879, and his administration ended June 30, 1897.

FAIRCHILD'S BACKGROUND

President Fairchild was born and reared on a farm, and thus knew rural conditions at first hand. He was a graduate of Oberlin College in classical and theological curricula, and an ordained minister, though never in charge of a church. He was elected an instructor in Michigan State Agricultural College in 1865, and the next year was made professor of English literature, and held this position until he left to become president of the Kansas College. He had been acting president at Michigan one year during the absence of the president. Michigan State Agricultural College was regarded at that time as the best of the agricultural colleges, one in which there had never been any question in respect to the legitimacy of its courses and practice. It was opened in 1857, and was made the beneficiary of the Morrill Act, February 25, 1863. It required daily manual labor of its students, for which they received pay, and was essentially an agricultural college with mechanical arts only as contributory features. It admitted students directly from the common schools to a four-year curriculum. It was fortunate in having a faculty of well-trained men of high character. Kansas State College was strongly influenced by Michigan ideas

through Professor Shelton, Professor Kedzie, and President Fairchild, and to a significant extent by later members of the faculty, Dr. N. S. Mayo, Prof. C. C. Georgeson, and Dr. L. D. Bushnell. The new president found nothing in the situation as President Anderson left it that called for any drastic changes based upon his experience at the Michigan institution.

President Fairchild and his family were received with great cordiality by the faculty, students, and citizens of Manhattan. Coming from another state, he was not embarrassed by political or other entanglements here, and was in position to consider objectively conditions as he found them, regardless of their origin. He was deeply democratic in his ideas concerning the management of an educational institution, and developed the weekly faculty meetings in the discussion of all topics of local College interest, and not merely as occasions for action on cases of discipline, or failure in scholarship.

FAIRCHILD'S IDEAS ON EDUCATION

President Fairchild had a firmly grounded faith in the value of education on college levels, in developing the power of discriminating thought through the study of the sciences, literature, and history. He regarded education, not merely as a preparation for a trade or profession, but as disclosing and strengthening the powers of the individual in any line. He believed that the College was "not so much to make men farmers as to make farmers men." By nobility of character, capacity for logical, independent thought, appreciation of human culture, and knowledge of modern science and mechanic arts in individuals, he held that farmers and artisans were brought to higher standards in their techniques, and in their adjustment to other social groups, and to society as a whole. Moreover, he believed strongly in the manifold good effects of working with the hands in various activities, including science laboratories, shops, and drafting rooms.

Thus, while their basic views and direct objectives differed, President Fairchild was able to use the educational set-up which he received from President Anderson without any abrupt changes. Fairchild emphasized the man, and through better men expected to elevate agricultural standards. Anderson fixed his attention on the cash value of a mastered trade, and expected that the student in attaining such heights would "climb up to the very rarest." Anderson's ideal was a splendid trade school, Fairchild's a college for persons engaged in agriculture, or preparing for occupations related to agriculture.

The aims of President Fairchild are clearly stated in the cata-

logue, and with such conciseness that they may be quoted nearly in full from the issue for 1893-94, as follows:

This College now accomplishes the objects of its endowment in several ways:

First, It gives a substantial education to men and women. Such general information and discipline of mind and character as help to make intelligent and useful citizens are offered in all its departments, while the students are kept in sympathy with the callings of the people.

Second, It teaches the sciences applied to the various industries of farm, shop, and home. Chemistry, botany, entomology, zoology, and mechanics are made prominent means of education to quick observation and accurate judgment. Careful study of the minerals, plants, and animals themselves illustrates and fixes the daily lessons. At the same time lessons in agriculture, horticulture, engineering, and household economy show the application of science; and all are enforced by actual experiment.

Third, It trains in the elements of the arts themselves, and imparts such skill as to make the hands ready instruments of thoughtful brains. The drill of the shops, gardens, farm, and household departments is made a part of a general education to usefulness, and insures a means of living to all who make good use of it. At the same time it preserves habits of industry and manual exertion, and cultivates a taste for rural and domestic pursuits.

Fourth, It strives to increase our experimental knowledge of agriculture and horticulture. The provision for extensive and accurate researches, made by establishing the Experiment Station as a distinct department of the College, offers assurance of more definite results than can be obtained by ordinary methods. ***

Fifth, It seeks to extend the influence of knowledge in practical affairs beyond the College itself. For this purpose, farmers' institutes have been organized in about 50 counties of the state, in which from two to four members of the Faculty share with the people in lectures, essays, and discussions upon topics of most interest to farmers and their families. These institutes, held for the past 13 years, have brought the College into direct sympathy with the people and their work, so as to make possible a general dissemination of the truths presented. The members of the Faculty desire correspondence as to farmers' institutes or any ques-

tions of practical interest in agriculture or related sciences.

The *Industrialist*, published weekly, and edited by Faculty and students, gives a wide circulation to matters of similar interest in the College. *** Members of the Faculty are also prominently connected with the state associations for the promotion of agriculture, horticulture, and the natural sciences, and education in general.

President Fairchild frequently used as filling in the *Industrialist* a brief statement concerning the value of education, as follows:

A Good Education Pays

1. In dollars and cents. All testimony of statistics agrees in showing that educated laborers of all ranks have better work and better wages than the uneducated.

2. In influence and position. Careful estimates make it certain that the chances of promotion to places of trust and power among men are almost two hundred times as great to an educated man as to an uneducated man.

3. In usefulness. The bulk of good work in the world—discovery, invention, government, philanthropy, and religion—is brought about by those who learn to think by study.

4. In enjoyment. Our pleasures grow out of what we are ourselves more than from surroundings. A well-trained man sees, hears, and handles a great deal more of the world than an untrained one. All things do him good, not so much because he owns them as because he understands them. He always has good things to think about.

These show the value set by President Fairchild upon the cultural features of education as distinguished from the subsistence value.

SYSTEMATIC ACCOUNTING

Some of the first accomplishments of the Fairchild administration were the working out of a system of accounts that showed the financial condition of the College in all its departments, and the establishment of a new and permanent plan of keeping the records of students in the College. He introduced the practice of making an annual inventory of the College property, and printed summaries in the biennial reports.

ADMISSION REQUIREMENTS

Changes in admission requirements were made very slowly. As previously, the purpose was to maintain direct educational con-

tact with the better rural schools. The last announcement under the Anderson administration was: "Candidates for admission must be fourteen years of age, and pass a satisfactory examination in reading; arithmetic through decimal fractions; and English grammar to syntax." The first announcement by President Fairchild was: "Candidates for admission *** must be at least fourteen years of age, and able to pass a satisfactory examination in reading, spelling, writing, arithmetic to percentage, and English grammar to the complex sentence." The next summer, geography was included, and the requirement in English was stated as "elements of English grammar." In 1884, "arithmetic including percentage and interest," and in 1891, "arithmetic," was required. In 1891, United States history was added, but no further change in subjects or scope was made during the Fairchild administration, 1879 to 1897, nor in the Will administration, 1897 to 1899.

Beginning in 1890 students were admitted on properly attested diplomas showing completion of an approved county course of study, certificates of passing the grammar grade in any approved city school, and on Kansas teachers' certificates issued by a county board of examiners.

Throughout the period, 1863 to 1909, admission was based on a degree of proficiency in the subjects needed to enter upon the curricula, not upon a certain number of high-school units. During this period preparatory classes were conducted to meet the needs of those who were unable to meet the admission requirements. Part of the time these were open only to students at least eighteen years of age.

CURRICULUM REVISION

In revising the course of study, President Fairchild and his faculty returned to the three-term calendar, President Anderson having changed to a two-term arrangement. Anderson had settled upon two curricula, one for each sex, but with only a few differences. Fairchild combined in one formulation the requirements for both sexes, but provided alternative subjects to meet the differences in needs of the two. All subjects in the Anderson curricula, excepting physical geography, were represented, and trigonometry, general history, mechanics, civil engineering, psychology, U. S. constitution, and advanced botany were added. English literature, which Anderson had provided for young women, Fairchild included in the work for young men also. It will be seen that the collegiate character of the curriculum was much strengthened.

In respect to the practical industrial work, Fairchild made changes slowly, and these were in the direction of more closely

coordinating this work with the more theoretical. Each student was required to have five hours a week of industrial work. Within certain limitations there was freedom of choice in this, but there was a gradual introduction of a limited number of required industrials: sewing, cooking, and dairy work for girls, and carpentry, farm, and garden for boys. There was no clinging to the view that one could master a trade as part of a college course, but a good beginning on sound lines was provided upon which proficiency could be developed by much additional study and practice.

Some changes in the curriculum were made in the course of the years, but these need not be detailed here. For students who desired more extended work in one or more lines, provision was made by offering many additional subjects from which choice might be made, and the student's course extended one year. One elective through the fourth year and two through the fifth year were thus available. This "Extended Course" gave credit toward the master's degree.

GRADUATE STUDY

During the earlier years of the College, courses for advanced study were not provided, but higher degrees were conferred in some instances in recognition of progress in professional, literary, or scientific studies. In 1871 the degree master of arts was conferred upon all the members of the class of 1867. Such blanket recognition was not accorded any other classes, but from time to time individuals were honored whose cultural growth was regarded as warranting it.

Criteria for use in selection gradually became more specific. In 1886 a special committee presented a report which was adopted by the faculty and became the basis for approval of individual plans for graduate study.

The basic principle among the provisions was a tacit recognition that this is an industrial institution, or a college of applied science. Each student taking graduate work with a view to qualifying for the master's degree was required to show proficiency in at least one of a group of arts, and one of a group of sciences. The arts were agriculture, horticulture, engineering, architecture and designing, and domestic economy. The sciences were botany, chemistry, zoology, entomology, and physics. There were members of the faculty who would have been quite willing to grant the degree on the basis of an industrial art only, and others who would have been pleased by proficiency in a science only, but insistence upon the combination was doubtless more in keeping with the genius of the land-grant colleges.

A thesis embodying the results of original research was required, and the assistance of members of the faculty was offered in directing study and research, and adapting them to the needs of the applicant.

As previously, graduates of three years' or more standing were eligible for consideration, but if a *resident* course of study had been followed for one year, the time might be reduced to two years. In 1894 this provision was made more definite by specifying that in the resident course "the work required shall be the equivalent of that necessary to pursue three full studies, the time in the aggregate to be divided approximately into three equivalents, two to the major and one to the minor study."

Students who completed an "Extended Course" of one year previous to graduation were in 1895 made eligible to receive the master's degree at the end of a one-year graduate course. The same year higher mathematics and economics were authorized as minors and credit in them considered in estimating proficiency.

ENROLLMENT

During the Fairchild administration, the enrollment steadily increased. That for 1878-79, the last year of the Anderson administration, was 214, and for 1896-97, Fairchild's last year, 734. The annual number graduated within the same limits similarly increased from 9 to 55. The maximum of 66 was in 1896. The increased percentage of those continuing in College to graduation probably reflected the increasing material resources of the State.

FARMERS' INSTITUTES

The break in College sponsorship of farmers' institutes which took place in 1874 was repaired by President Fairchild in 1881-82. He had participated in such institutes in Michigan, and used in Kansas the experience of the sister institution, Michigan State Agricultural College. In an editorial in the *Industrialist*, January 1, 1881, President Fairchild suggested that organizations of farmers in several localities make arrangements for holding institutes in which members of the College faculty should assist, and the proposal was very favorably received.

November 26, 1881, an article was published which embodied definite plans of the College, and suggestions to communities interested in holding institutes. The following paragraphs may be quoted, as they describe the general plan used for nearly twenty-five years:

The professors will, under the direction of the board of trustees, take part in six farmers' institutes, in as many

portions of the State, provided sufficient encouragement is given by application from local organizations.

Any farmers' club, grange, or similar organization making application should undertake to provide a suitable place of meeting, make all necessary arrangements for gathering those interested, meet all local expenses, and furnish at least one-half the papers and addresses. The program may be arranged after consultation with the faculty.

The institute should be organized on the evening of one day, and closed on the evening of the next day, giving four sessions of from two to four hours each. Pains should be taken to call out full discussions of the various topics presented, so that the practical experience of farmers may be truly presented. Every question has its many sides, and is better understood when carefully considered in all of its bearings. All are but learners in this wide field of research, and may profit by each other's experience.

The local press should be interested in the institute so far as to aid in circulating notice of the time, place, and exercises, and to give a careful report of proceedings and papers.

March 25, 1882, President Fairchild reported on the success of the first series of institutes. These had been held in Barton, Clay, Cloud, Coffey, Jackson, and Osage counties, and were regarded as very helpful. It was proposed to hold institutes in six additional counties the next winter. The general plan for these institutes included distributing them through the State, but frequently assistance was given to the same locality repeatedly. The number of institutes held each winter gradually increased, reaching 22 in 1894-95.

In 1897-98, under the Will administration, arrangements were made to hold institutes in series along the several railroad lines. This required more prolonged absences of College speakers from classroom duties, but the number of institutes assisted rose to 30 in 1897-98, and 62 in 1898-99, and the average cost for each was materially reduced.

Up to 1899 the expenses of faculty members in attending farmers' institutes were met by allowances made by the Board of Regents from the income fund of the College. The legislatures of 1899, 1901, and 1903 made appropriations of \$2,000 for each of the years 1899-00 to 1904-05. The legislature of 1905 merged any allowances for farmers' institutes in general appropriations for current expenses, and the Board of Regents allowed \$1,500 for

1905-06, and \$2,500 for 1906-07. Amounts designated for farmers' institutes in later years showed a rapid increase.

THE AGRICULTURAL EXPERIMENT STATION

Probably the most significant addition to the functions of the College which was made during the Fairchild administration was the organization of the Agricultural Experiment Station under the provisions of the Hatch Act approved March 2, 1887. The



ILLUSTRATIONS HALL

This building was erected for horticulture and kindred subjects. The view shows it when so employed, this being a rear view including the greenhouse and propagating pits with Anderson Hall and the Chemistry Building in the background. The building is now used by the College photographer, and also for the work of student pastors. The greenhouse and the propagating pits have been razed.

act itself was of course in no sense a product of the administration, but the Regents and faculty actively participated in attempts to influence Congress to take favorable action on the bill.

March 7, 1887, the faculty voted that President Fairchild and Professors Shelton, Failyer, Popenoe, and Kellerman should constitute a special committee to devise means for carrying out the provisions of the act. Although the act was intended to appropriate \$15,000 to each state to carry out its purposes, the Comptroller of the Treasury held that, owing to a verbal defect, no appropriation was actually made. This was not corrected until a special appropriation bill was passed, which was approved February 1, 1888. The delay may have been a somewhat disguised blessing, as it gave opportunity for much-needed discussion in all the insti-

tutions, and in meetings of organizations. There can be no doubt that first expenditures were more wisely made than would have been the case without such discussion.

PLAN OF ORGANIZATION

The organization adopted for the Experiment Station was the result of a great deal of discussion, and displayed the same democratic attitude which was exemplified by President Fairchild in the control of its educational procedures. The plan was adopted by the Board of Regents, February 8, 1888. Its vital feature was this provision: "The general executive management of the Station shall



THE SECOND STONE BARN

This is a view of the second stone barn as erected in 1877 and enlarged in 1885. It is shown with a number of wooden buildings constructed at various times. It was razed in 1914, the material being used in the construction of the third farm barn, used by the department of animal husbandry.

be under the control of a council to consist of the president of the College, the professors of agriculture, horticulture and entomology, chemistry, botany, and veterinary science, and such other officers of the College as the Board may designate."

A second provision was: "The president of the College shall be *ex officio* chairman of the council, and shall have the same supervisory control of the Experiment Station as of other departments of the College."

The professor of agriculture was designated to "be *ex officio* director of the Station, the duties being to keep the records of all meetings, receive and maintain all general correspondence with the Station, attend to the publication and distribution of all reports and bulletins, and, under direction of the council, certify to all bills, and act as general superintendent in executing the plans of the council." Professor E. M. Shelton thus became the director of the Station, and was designated by the Board as the one to exercise the franking privilege granted by the Hatch Act.

The duties and scope of the work of the heads of the several departments were outlined in general terms, and it was provided that "Each member of the council shall have full control of experiments assigned to his own department, and if any question arises

as to the scope of any experiment, or by whom it shall be conducted, the same shall be decided by the chairman of the council."



E. M. SHELTON

Agriculture, 1874-1890. Director of the Agricultural Experiment Station, 1888-1890.

It will be seen that the experiments to be undertaken in the Station were determined by the combined judgment of a group of men, and that the director was purely executive in his functions, outside the work approved for his own department; and that in case of a disagreement between, or among, department heads, the president of the College held the deciding power. This arrangement grew out of the previous equality of status of department heads, and the fact that there was none to which the others were willing

to become subordinate. This form of organization continued until 1906. Attention may also be called to the re-establishment of the department of veterinary science. Dr. R. F. Burleigh was chosen to head the department of physiology and veterinary science. The other members of the council were: President Fairchild, chairman; Professor Shelton, agriculturist; Professor Failyer, chemist; Professor Popenoe, horticulturist and entomologist; and Professor Kellerman, botanist. Assistants selected by the respective heads of departments, and ratified by the council, were elected by the Board April 3, 1888. They were: H. M. Cottrell, agriculture; C. L. Marlatt, entomology; S. C. Mason, horticulture; W. T. Swingle, botany; and J. T. Willard, chemistry. Wm. Shelton was foreman of the farm.

EXPERIMENTATION NOT A NEW ACTIVITY

The College did not enter a new area of activity when the Agricultural Experiment Station was established. Experiments had been regarded from the very first as legitimate work, and even

obligatory, and for at least twenty years had been in progress and increasing in volume. These had covered a wide range in forestry, horticulture, variety testing, crop production, fertilization, tillage, feeding experiments, animal production, milk production, ento-



SHELTER IN THE HORSE AND BUGGY AGE

In the earlier days of the College many members of the faculty and some students drove to the College daily. They were permitted to erect shelter for their horses and buggies on the campus. After a few years they were required to join in the erection of the more sightly structure shown in the cut above. Hitching racks were also provided for those not having sheds.

mology, botany, and chemistry. Results had been published in the *Industrialist*, agricultural papers, reports of the State Board of Agriculture, Transactions of the Kansas Academy of Science, and elsewhere. Professor Shelton published pamphlets describing his work in 1883, 1884, and 1885. The Hatch funds thus came to experienced men and permitted greater expansion and diversification of the work.

It is not the purpose to go into any detail at this place concerning the Station work. Suffice to say that during the Fairchild administration 75 bulletins and ten annual reports were produced. The first two annual reports included results of investigation, but subsequent issues were for the most part brief executive documents. The bulletins touch a wide range of research.

THE FACULTY AND THE DEPARTMENTS

With increased enrollment and the establishment of the Agricultural Experiment Station the number of the faculty and employees necessarily became greater. President Fairchild was very loyal to his faculty, and very few resignations were requested or presented without request. Subordinate members of the force resigned to accept higher positions elsewhere in several instances, or

for the purpose of advanced study. A practice of employing advanced students to assist in teaching preparatory subjects, and in laboratory instruction grew up. A large fraction of these consisted of graduate students. Space does not permit comment upon all changes in the force.

HOME ECONOMICS

September, 1882, Mrs. Cripps was succeeded by Mrs. Nellie Sawyer Kedzie, of the class of 1876, and widow of Prof. Robert F. Kedzie. She remained to the end of this administration, and young women trained in home economics under her guidance were placed in responsible positions in many institutions. Through her extraordinary energy, spirit of study, unusual ability in public speaking, and charming personality, she attained a nation-wide reputation in her field. Mrs. Kedzie left in 1897, and became professor of domestic science in Bradley Polytechnic Institute, Peoria, Illinois. She was married to Rev. Howard M. Jones July 17, 1901, but her marriage did not conclude her public career in home economics. Mrs. Kedzie Jones has always been an effective lecturer, and from 1918 to 1933 she was extension leader in home economics in the University of Wisconsin, where she still is a professor *emeritus*.



Nellie Sawyer Kedzie Jones, home economics, 1882-1897.

The increase in the teaching load in home economics made additional teachers necessary, and in 1884 Mrs. Elida E. Winchip took the instruction in sewing and dressmaking, and continued in it until June 30, 1897. Assistants were also employed in both sewing and cooking.

MILITARY TRAINING

In 1881, the College resumed the performance of its duty to give instruction in military science and tactics, Lieut. Albert Todd being detailed by the War Department for this work. He did some other teaching also, as did several of his successors. Lieutenant Todd's detail expired in 1884, and subsequent incumbents within this administration were: Lieut. W. J. Nicholson, 1884 to 1887; Lieut. J. F. Morrison, 1887 to 1890; Capt. E. B. Bolton, 1890 to 1894; and Capt. H. G. Cavanaugh, 1894 to 1897.

Military training was optional at first, but by action of the Board of Regents, taken April 6, 1894, was made a requirement

for all male students below the third year. President Fairchild recognized the legal requirement that the institution should offer military drill, and conceded that benefits were derived from it, but opposed making it compulsory.

PRINTING

To the regret of the faculty, Supt. A. A. Stewart, of the printing department, resigned October 1, 1881, to accept a better position on the Topeka *Capital*. Mr. George F. Thompson, a mature student and practical printer, was placed in charge, at first temporarily, and served until 1886, when he took a position in the U. S. Department of Agriculture, and was succeeded by Mr. J. S. C. Thompson January 19, 1887, who held the position to June 30, 1897, the end of the Fairchild administration.

CHANGES IN 1883—MATHEMATICS, BOTANY, ENGLISH

In 1882, Gov. John P. St. John, a champion of prohibition, sought election to the governorship for the third time. He was opposed by Hon. Geo. W. Glick, of Atchison, a man who had interested himself in the College for many years. Mr. Glick was elected by the assistance of Republicans who opposed prohibition, and of others who opposed a third term for any governor. All others on the ticket with Mr. Glick were defeated.

Governor Glick appointed as Regents of the College three men reputed to be Republicans and three Democrats. All were new to the Board. President Fairchild was a Regent *ex officio*. In June, 1883, the Board of Regents requested the resignations of M. L. Ward, professor of mathematics and engineering, and J. E. Platt, professor of elementary English and mathematics. While President Fairchild would not have recommended this action, it is not evident that he opposed it with any vigor. Professor Platt had been on the faculty since the second year of the College, and Professor Ward for ten years. They were the only ones who had served throughout the Anderson administration.

The removal of Professors Ward and Platt aroused much comment in the state. The newspapers which took part in it were aligned as a rule according to their political affiliations. Most of the students were friendly to the professors, and meetings were held in which resolutions of esteem were adopted, and a request that this action be not taken was sent to the Board. The Board passed a motion commending the students for the respect they showed their instructors, but affirming that it felt compelled to refuse their request. "Regent Leland offered the following resolu-

tion, which was adopted: 'Resolved that in requesting the resignation of Professors Ward and Platt, the Board are not actuated by any personal ill will, but are prompted only by the desire to promote the best interests of the College.'"

On the other hand, it was freely asserted by opponents of the action that the professors were removed because of their pronounced activity in support of prohibition. As motives are not subject to record, and verbal arguments and statements only imperfectly, it was never possible to arrive at an accurate estimate of the situation.

The Board elected David E. Lantz, professor of mathematics, and Benjamin F. Nihart, professor of mechanics and engineering. Professor Lantz was superintendent of the Manhattan schools, and had been on the ticket with Mr. Glick as a candidate for the office of state superintendent of public instruction. Professor Nihart had been professor of mathematics in Monroe Institute, Atchison, Kansas. The Board also created a new position and elected Dr. Wm. A. Kellerman, professor of botany and zoology. He was a brother of H. C. Kellerman, a member of the Board.

Professor Lantz retained his position until June 30, 1897. In later years he was employed by the College in rodent control, and still later in the U. S. Department of Agriculture. Professor Nihart's work in the College was changed in 1885, when E. B. Cowgill became professor of mechanics, physics, and engineering. In 1886 he left, and successfully engaged in educational work elsewhere until 1931. Professor Kellerman was one of the best qualified teachers and investigators that the College has ever had. He aroused with great success the interest and enthusiasm of his students, and his resignation, September 1, 1891, was regretted by all. He became professor of botany in Ohio State University, and held the position the remainder of his life. Doctor Kellerman's successor was Mr. A. S. Hitchcock, who came January 1, 1892, and served with conspicuous ability until March 1, 1901. He was agrostologist for the U. S. Department of Agriculture for many years.

ENGLISH

Mr. W. H. Cowles was employed as instructor in English and history in 1882, and left in 1885 to engage in the study and practice of law. He was succeeded by Mr. Oscar E. Olin, who was advanced to a professorship the next year. In 1888 he was relieved of responsibility for history, and as professor of English language and literature remained on the faculty until June 30, 1898. He was a highly successful teacher, and much beloved by his students.

CHEMISTRY, PHYSICS, AND ENGINEERING

In 1885 the department of chemistry and physics was divided, and instruction in physics assigned to Elias B. Cowgill, earlier an able student and teacher in the University of Iowa, but at that time a newspaper man in Sterling, Kansas. His chair also included mechanics and engineering. He gave two years of acceptable service, and then returned to the newspaper field. Later he edited



CHEMISTRY BUILDING

This view shows the chemistry building as improved in respect to facilities for ventilation about 1885. The College pump is shown in the middle distance.

the *Kansas Farmer* for many years, and was influential in molding public opinion concerning the College. In 1898 he declined appointment as a Regent, on the ground that as editor of the *Farmer* he could be of more service to the College if he had no official connection with it.

Following the resignation of Professor Cowgill in 1887, Mr. F. J. Rogers, '85, a graduate student, taught physics for two years. In later years he was a professor of physics in Stanford University. Lieut. J. F. Morrison handled the instruction in physics in 1889-90, and September, 1890, the department was taken over by Ernest R. Nichols, who retained it to 1900. At that time he was made president of the College, having already acted in that capacity one year. The establishment of curricula in engineering, beginning in 1898, insured continuity in adequate attention to instruction in physics thereafter.

MECHANIC ARTS

With an absence of one year, 1882-83, when the position was filled by Mr. M. A. Reeve, Mr. T. T. Hawkes was superintendent



O. P. Hood
Mechanical engineering and shops, 1886-1898.

of the workshops from September 1, 1878, to August 31, 1886, when the duties were assumed by Mr. O. P. Hood, a graduate in mechanical engineering. Mr. Hood at once transformed the system of instruction, and when Professor Cowgill resigned in 1887, was given an instructorship in mechanics and engineering, also. In 1889 he was made a professor, and continued in the position until 1898. He kept up continuous pressure for additions and improvements in the shops; and power machines, a foundry, and a machine shop were among the results. In 1897-98 he was of much assistance to President Will in the introduction of a curriculum in mechanical engineering, and resigned to accept a more desirable position

with the Michigan College of Mines, June 30, 1898.

HISTORY

Mr. Francis H. White was employed as instructor in history and constitutional law in 1888, and promoted to the professorship in 1889. He was a well-trained student, an effective teacher, and a valuable all-round member of the faculty. His duties as a teacher shifted somewhat toward economics and industrial history, and he remained on the faculty to the end of this administration, June 30, 1897.

VETERINARY MEDICINE

With the establishment of the Experiment Station in 1888, the College returned to giving instruction in veterinary medicine. Dr. Robert F. Burleigh was employed as professor of physiology and veterinary science, and veterinarian for the Station, from May 1, 1888, to August 31, 1889. The position remained vacant for a time, and in October, 1890, Dr. Nelson S. Mayo was employed, ranking as an instructor until June, 1891. He served through the administration, and was distinguished by his practical common sense, imperturbable good spirits, and sense of humor, as much as by his professional attainments. At a later period he again served the College in a similar capacity.



FACULTY AND ASSISTANTS 1888-89

Top row, left to right, J. G. Harbord, C. M. Breese, W. L. House, C. A. Gundaker, A. C. McCreary, Wm. Baxter, W. T. Swingle, S. C. Mason.

Middle row, Wm. Shelton, H. M. Cottrell, F. H. White, F. J. Rogers, A. B. Brown, J. S. C. Thompson, R. F. Burleigh, O. P. Hood, J. T. Willard, C. L. Marlatt.

Bottom row, J. D. Walters, O. E. Olin, I. D. Graham, W. A. Kellerman, E. A. Popenoe, Geo. T. Fairchild, E. M. Shelton, G. H. Failyer, D. E. Lantz, Nellie S. Kedzie, Elida E. Winchip, J. F. Morrison.

AGRICULTURE

December 31, 1889, Prof. E. M. Shelton resigned to become instructor in agriculture for the Colony of Queensland, Australia, where he rendered fine service for several years and became head of the agricultural college at Brisbane.

Prof. Charles C. Georgeson succeeded Professor Shelton January 1, 1890, and served to the end of the administration. He conducted his work on broad and scientific lines. Professor Georgeson was a native of Denmark, and his foreign origin was somewhat apparent in his speech. This may account in part for a seeming brusqueness, and possible lack of tact, that impaired his relations with others. After leaving in 1897 he was given charge of experimental agricultural work in Alaska and contributed much to the prosperity of that territory.

HORTICULTURE AND CHEMISTRY

Two who attained professorial rank during the Fairchild administration were Silas C. Mason and Julius T. Willard. Both were gradually promoted from assistantships, the former to be professor of horticulture in 1894, and the latter associate professor of chemistry in 1896. Professor Mason was a thorough student and careful and painstaking investigator. His connection with the College ceased in 1897, but he had a distinguished career in the U. S. Department of Agriculture. Professor Willard continued in the employment of the institution.

ECONOMICS

An appointment that developed into unexpected significance was that of Thomas Elmer Will to a professorship in economics in 1894. He was a man of unsurpassed industry, a penetrating student, and an esteemed teacher. He probably handled the controversial phases of economics with as good a degree of impartiality as others would have, and attempted to present the various views. July 1, 1897, he became president of the College.

LIBRARIANS

From the foundation of the institution, the care of the library had been a duty added to those properly belonging to some member of the faculty. Professors Schnebly, Lee, Whitman, Ward, Cowles, Nihart, Lantz, and others had thus served. Assistant librarians were employed beginning with James G. Harbord in 1887, and including Agnes M. Fairchild, Jane C. Tunnell, and Julia R. Pearce. In 1894, Miss Pearce, after serving two years as



THE OLD CHAPEL

assistant, was made librarian and a member of the faculty. She continued in this position until March 31, 1898. A committee on library exercised important functions from the earliest times to beyond the close of this administration.

DEPARTMENTAL CHANGES

The increase in the size of the student body, and the enlarged scope of the institution, especially as determined by the Experiment Station, created opportunities to reduce the area of responsibility of some of the members of the faculty, and thus to permit more satisfactory work. More advanced subjects could be offered to graduate students, and as electives. Thus, near the beginning of the Fairchild administration, Professor Popenoe had charge of entomology, zoology, botany, and horticulture; Professor Failyer, of chemistry, physics, mineralogy, and geology; Professor Ward, of mathematics, English, mechanics, and engineering; and Professor Shelton, of physiology, as well as all phases of agriculture. When Professor Lantz was employed in 1883, mathematics became a department unhampered by other subjects, and in 1885 the arrangement for Professor Cowgill relieved the chemistry department of physics and meteorology. Professor Kellerman, appointed in 1883, was a botanist, but received zoology as well as botany from Professor Popenoe, physiology from Professor Shelton, and geology from Professor Failyer. When the department of physiology and veterinary science was established in 1888, zoology, geology, and physiology were transferred to it. September 1, 1894, horticulture was separated from entomology and made an independent department with Professor Mason as its head, and at the same time zoology was combined with entomology under Professor Popenoe, and geology attached to the department.

The foregoing exhibits some of the "growing pains" of the institution, but many of a more temporary nature, or involving less fundamental subjects, must be left unmentioned. The departments of mathematics, English, history, economics, botany, chemistry, physics, and zoology had become entirely separate or had attached to them only closely kindred subjects. Agriculture, horti-

THE CHAPEL (Opposite Page)

A view toward the rear of the chapel in Anderson Hall, looking toward the east. Henrietta Willard, later Mrs. John H. Calvin, is at the piano. A year or two later the chapel was enlarged to the west. After the Auditorium was occupied in 1904, a floor was built through the old chapel giving it a one-story ceiling and creating rooms above for the art department. In 1920 the sloping floor was replaced by one on the level with that in the hall, and Recreation Center thus created. In 1939 a portion of the platform at the west was cut off to provide additional space for the dean of women.

culture, veterinary medicine, home economics, and mechanic arts were still in a generalized state of development.

PHYSICAL EDUCATION AND ATHLETICS

The natural interest in sports exhibited by young men found an outlet in the organization of baseball teams at a very early period in the history of the College. Games were played with teams at other points. Under the Fairchild administration out-of-town games were held to a low limit, though by 1897 ten match games were allowed, four of these being outside Manhattan.

Interest in indoor gymnastics appeared, and the constitution and bylaws of an Athletic Club were approved by the faculty March 19, 1883. The Athletic Club purchased some equipment, and the Board of Regents added to this from time to time. The greater part of the lower floor of "the old barn," now (1939) Farm Machinery Hall, was used as an armory and drill room by the military department, and constituted the "gymnasium" for the Athletic Club.

These activities of the Athletic Club were supervised in a general way by a member of the faculty, or a committee, and an advanced student was in immediate charge when gymnasium practice was in progress. Lieut. W. J. Nicholson conducted a class in light gymnastics beginning January, 1885. Dr. N. S. Mayo, professor of physiology, was faculty member in charge from October, 1890, to September, 1894, when Capt. H. G. Cavanaugh, professor of military science and tactics, took over the responsibility. The first annual Field Day was conducted June 6, 1896, with contests in an extended series of events. The second observance of Field Day was May 17, 1897.

Interest in football became noteworthy among the students about 1890, but the game was not looked upon with favor by more than a few members of the faculty. The organization of a football club was disapproved March 30, 1891, though purchase of a football was approved. The playing of match games except at the College was permitted to only a very limited extent.

President Fairchild in his last three biennial reports to the Board of Regents expressed his belief that intercollegiate contests of any kind are serious intrusions upon the regular work of the students participating, and that the mass of students are merely entertained. He urged "the importance of putting college sports and physical training upon a basis entirely independent of the excitement and dishonesty of contests between colleges."

In the provision of physical exercise for the young women the

president and faculty showed a cooperative, even if not enthusiastic, attitude. As "calisthenics," instruction was provided in 1892-93, by the employment of a graduate student, Miss Minnie Reed, '86, to conduct a volunteer class. Miss Reed had received special training in this kind of work, and it included free exercises, marching, Swedish movements, exercises with dumbbells and clubs, and the military setting-up exercises. Others who continued this instruction were Miss Bessie Belle Little, '91, 1893-94, Miss Bertha S. Kimball, '90, 1894-95 and 1895-96, and Miss Mary E. Lyman, '94, 1896-97. The work under Miss Reed and Miss Little was given in the southwest basement room of Anderson Hall. In 1894 it was transferred to a room on the south side of the basement of Fairchild Hall.

PUBLIC SPEAKING

Throughout the history of the College the importance of instruction in oral and written speech had been recognized, and special work was given during the Fairchild administration under the designation, "rhetoricals," in addition to the regular curricular subjects in English. The classes in rhetoricals were distributed among all the members of the faculty who had any capacity for such work. Gradually it became attached to a large extent to the department of English, and for two years, 1893 to 1895, Mr. Howard M. Jones, of the department, gave his entire time to this. Mr. Jones did conscientious and effective work. He resigned to study for the ministry, and in later years he and Mrs. Nellie S. Kedzie were married. After the resignation of Mr. Jones, there was a reversion to previous conditions. Participation in oratorical contests conducted by a state organization was not permitted.

MUSIC

Instruction in music was continued on the fee basis entirely until 1884. Beginning in 1882, Prof. W. L. Hofer, teacher of instrumental music, was allowed, in addition to music fees, a salary of \$200 a year in consideration of his general services. Previous to 1883, Prof. J. E. Platt had taught classes in singing, and received fees from the members. His connection with the College ceased in 1883, and such classes were continued by Professor Hofer. In 1884, the salary was increased to \$500, and this class instruction in vocal music made free. In 1886, on account of his impaired health, Professor Hofer was replaced by Prof. A. B. Brown. Professor Hofer had excelled as a teacher of piano; Professor Brown was stronger in band, orchestra, and choral singing. In the catalogue for 1887-

88 announcement was made of the opportunity for students to "join in the weekly rehearsals of the College Orchestra or the Cadet Cornet Band." The orchestra was mentioned in all later catalogues, but reference to a band was not made again until the catalogue of 1890-91. In October, 1893, the fees in instrumental music were abolished, and Professor Brown's salary made \$1,200.

FINANCES

Throughout this administration the College and the legislature continued to adhere to the view that the income from the endowment fund ultimately should pay the current expenses of the institution. The Regents and the presidents were reluctant in asking for appropriations for other purposes than those required by the organic act, and the legislatures were still more reluctant in making them, and went even further and passed bills the result of which was impairment of the endowment, and reduction of the income fund. Reference has already been made to these. President Fairchild finally succeeded in 1881 in getting the legislature to restore the losses sustained by these funds, which amounted to \$17,979.09.

The College was \$6,186.27 behind in payment of current expenses June 30, 1879, and \$5,598.14, June 30, 1880. June 30, 1881, the treasurer had a balance of \$13,104.04, and for the first time in many years the College was out of debt. This condition did not persist. The needs of the College were so evident, and hope for the future so strong, that expenditures in advance of income were made, and a small deficit in 1886 persisted with fluctuations from year to year, and in 1896 reached \$16,589.71. A deficiency appropriation of \$10,000 by the legislature of 1897 was made, but the vouchers due and unpaid June 30, 1897, amounted to \$7,385.73.

THE HATCH ACT

The available funds were materially increased by the Hatch Act, which provided for an appropriation of \$15,000 a year. This began in 1888. This fund was for conducting agricultural investigations and experiments, and printing and distributing the results.

THE MORRILL ACT OF 1890

An act approved August 30, 1890, the second Morrill Act, was for "the more complete endowment and support of the colleges for the benefit of agriculture and mechanic arts established under the provisions of an act of Congress approved July 2, 1862." Pursuant to the provisions of this act, the College received as for

the year ending June 30, 1890, \$15,000 and amounts increasing annually by \$1,000 until a maximum of \$25,000 was reached in 1900, and which has been continued since. This fund may be "applied only to instruction in agriculture, the mechanic arts, the English language, and the various branches of mathematical, physi-



THE CAMPUS, 1885

View of the campus in the winter of 1885-86. Taken from the roof of the residence of Professor Failyer, then on the southeast corner of Eleventh and Moro streets. It shows the newly added residence for the president and the "old barn" before it had been remodeled.

cal, natural, and economic science, with special reference to their applications in the industries of life, and to the facilities for such instruction."

INCOME TIED UP

For many years all cash, and all financial papers, the property of the College, were kept in the custody of the treasurer, the loan commissioner, or some other officer of the institution. In an act approved March 6, 1883, it was provided by section 1 that "all moneys, bonds, mortgages, promissory notes, or other evidences of indebtedness due or belonging to the endowment fund of the State Agricultural College, now in the hands of the treasurer, loan agent, or land agent of said State Agricultural College, are hereby ordered turned over to the treasurer of the State of Kansas on or before April 1, A. D., 1883 ***."

Section 3 of this act reads: "The interest accruing on the investments of the State Agricultural College funds, and the interest paid upon the sales of Agricultural College lands, shall be paid over to the treasurer of the State Agricultural College by the State treasurer, upon the warrant of the president of the board of regents, attested by the secretary."

In 1892 the attorney general ruled that this law was unconstitutional, and that the treasurer could not pay out these College funds until they had been appropriated by the legislature. The

result was that until the legislature by an act approved March 3, 1893, released these funds, the College was greatly embarrassed financially. Local business houses assisted by carrying accounts until funds were available.

The most inconvenient result of this situation was the tying



CAMPUS IN 1886

This view is reproduced from a photograph which unfortunately is in bad condition. The residence in the foreground is that now occupied by the superintendent of the poultry plant. It was not College property when this view was taken. The barn in the foreground was razed in 1914. The president's residence shown between the observer and Anderson Hall was destroyed by fire in 1895.

up of funds for meeting pay-rolls. After much consideration the Board, April 12, 1892, adopted a series of resolutions which stated the situation, and authorized the loan commissioner of the Board to invest the endowment fund of the College in the monthly pay-rolls issued to pay teachers' salaries and the wages of laborers. This procedure was followed for a year. It is clear that this deprived the College of interest that would have been received if the funds had been invested in school bonds, and the legality of the proceeding may be questioned from the standpoint of the obligation of the State under the terms of the Morrill Act. However that may be, the device bridged the emergency, and since then it has been a special care of those in charge to see that the income fund is duly appropriated at each session of the legislature.

BUILDINGS

Material progress during the Fairchild administration was significant, but not remarkable, for a period of nearly eighteen years. President Fairchild was strongly impregnated by the general belief that the state should be asked to furnish only the buildings and the services for which it was obligated under the Morrill Act. There

was, therefore, not as much in the line of equipment obtained as should have been, and that which seemed indispensable gradually produced a financial overdraft.

In respect to buildings, the completion of the main college building, now Anderson Hall, was the first objective. The north wing had come to occupation in March, 1879. The central part with the corridor was completed late in 1882, and the south wing and corridor two years later. The seating capacity of the chapel was soon reached by the demands made upon it, and in 1887 this part of the building was extended to the west twenty feet.

A greenhouse, connected with Horticulture Hall, was constructed in 1883, and in 1888 a small one-story building was provided from Experiment Station funds for offices for the horticul-



THE PRESIDENT'S RESIDENCE

President's residence erected in 1885 and destroyed by fire caused by lightning in 1895. This building stood on the site now occupied by Education Hall.

ture department, and connected with it was a series of three simple greenhouses or propagating pits.

In 1889 a stone barn was erected for the horticulture department. This was located on a site east of the present library and near the north and south drive. It was razed in 1919, and the material used to enlarge the old residence for the construction of the present (1939) student infirmary.

In 1885 a residence for the president was erected, and the one hitherto occupied by him was transferred to the professor of agri-

culture, who for some years had, with his family, used rooms in the "old barn," the college building of Anderson's days. The Auld place, including four acres of land, was purchased in 1895, which provided a residence for the farm foreman. This is now (1939) occupied by the superintendent of the poultry plant.



FARM MACHINERY HALL

Farm Machinery Hall. In 1873 this was erected as one wing of the projected barn. In 1875 the interior was rebuilt to convert it into a building for college classes. In 1886 the exterior as well as the interior was remodeled. It has been used for several different purposes. It served as the armory from 1881 to 1911.

An addition on the north side of the stone barn was made in 1885 which was designed especially for experiments in feeding. In 1886 the "old barn" received another overhauling and was transformed to provide for much of the museum material, and to improve the quarters for the department of botany. The military department continued to use the ground floor. A gable in the south roof improved the appearance, and an entrance on the south side added to the convenience.

A building attached to the woodshop at the southwest corner was erected at a cost of \$4,000 and occupied the fall of 1891. This was of modern construction for its use as a machine shop, and was 40 x 80 feet in size. At first it also housed the blacksmithing equipment. Connected with this building was an iron foundry and brass foundry, 20 x 40 feet in size. A Colliau cupola furnace, six-foot planer, several lathes, eight Sturtevant forges and various other items of equipment provided the beginning for practical training

in mechanical engineering. Power machinery had been installed in the woodshop in 1887.

The legislature of 1893 appropriated \$60,000 for the erection of a "Library and Agricultural Science Hall," the building named Fairchild Hall in 1902. This was completed in the summer of 1894 and occupied at the beginning of the fall term. It was dedicated December 28, 1894, by the Kansas Academy of Science. This took the form of an elaborate banquet prepared by the students in household economy under the direction of Prof. Nellie S. Kedzie, and



SHOPS

View showing the woodshop, and the iron shop added in 1891.

accompanied by many speeches by out-of-town men prominent in different vocations and professions.

This building embodied better workmanship than any previously erected on the campus. The walls were thicker, the bearing surfaces of the rock dressed, and the partitions of terra cotta. Slow burning construction was thus provided for the protection of the library and the museums housed in it. The rear part of the building was only one story in height. In 1903 this was raised to two stories, and at the same time the building was enlarged to the northwest. The standards of construction were very much lower for this part of the building.

Largely through the personal efforts of Prof. Nellie S. Kedzie the legislature of 1897 was persuaded to make an appropriation of \$16,000 for the erection of a building for the work in domestic economy. This was built that year by the succeeding administration, and dedicated in January, 1899. It was given the name Kedzie Hall in honor of Professor Kedzie in 1902. This is believed to be

the first building in the country provided wholly for work in home economics. It is now used by the departments of English, and industrial journalism and printing.

THE CAMPUS

The development of the College campus progressed markedly during the Fairchild administration. A few months earlier, February, 1879, the east and west road located straight across the campus between the mechanical building and the chemistry building



FAIRCHILD HALL

This building, erected in 1894 as Library and Agricultural Science Hall, was named in 1902 in honor of Geo. T. Fairchild, whose distinguished work as president extended from 1879 to 1897. The building was enlarged in 1903, and in 1927 the interior was completely remodeled to provide more adequately for the departments of entomology, zoology, geology, and history and government.

was closed as a through highway. The ends of this road still exist, and give access to the interior drives. An entrance on the north side was provided that, while serving the business needs of the public with the College, did not invite use merely as a convenient way to Manhattan.

In January, 1885, Prof. Maximilian Kern, of Columbia, Missouri, was employed to prepare a general plan for the campus, including drives and plantings. His plan was adopted in March, and planting of trees and shrubs began at once. These still constitute the fundamental framework of the landscape architecture, but unanticipated building has caused changes in the drives. In his planting plan Professor Kern grouped different species of the same

genus so that the campus might be a convenient outdoor laboratory for student use. A feature which gave quick results was the transplanting of large pines from the old campus. This was effected in the winters of 1881 to 1886 by moving the trees when the ground was frozen, the roots being encased in large balls of soil.



KEDZIE HALL

This building was the first one erected in this country for the sole use of home economics departments. It was called Domestic Science Hall, but in 1902 was named Kedzie Hall in honor of Nellie S. Kedzie, who was at the head of the work in home economics in the College from 1882 to 1897 and who has given distinguished service in the same field up to the present time. The building is now occupied by the departments of English and industrial journalism and printing.

The largest pine trees now in the central part of the campus had that origin.

Roads were improved by grading, and covering with gravel from the old College farm. The road to the Vattier Street entrance, with its connections, was laid out, graded, and graveled. Walks that in those days seemed very good were constructed of cinders from the heating plant.

The need of additional land for agricultural purposes began to be felt, and leases of certain areas were made from time to time, and eight small tracts were purchased. These were located in the quarter section north of the campus, and their total area was 68

acres. The residence now occupied by the superintendent of the poultry plant was included. The land cost from \$60 to \$110 an acre, and income from the endowment fund was used in paying for it.

WATER SUPPLY AND SEWERAGE

The natural water supply near the campus buildings was not ample. The old well, a feature of the Foster home, furnished a limited supply of excellent water, and other wells at lower levels



THE CAMPUS, 1895

View of the campus 1895 from the roof of the residence of J. T. Willard, 1211 Moro Street. This shows to the left Fairchild Hall in its first form before the rear had been raised to two stories in height and extension at the northwest constructed. The residence for the president had been burned, and the "old barn" had been remodeled.

were serviceable. These were supplemented by cisterns in proximity to all or nearly all the buildings. In 1884 there were eleven cisterns. In 1887 the city of Manhattan constructed a waterworks system and made provision to supply the College. The legislature, 1887-89, appropriated \$3,000 for water pipes and sewers for the College. This ample supply of water under pressure was of great advantage even though at that time the water was of poor quality because of its hardness and iron-content. The College paid from \$300 to \$1,000 a year to Manhattan for water, most of the time, \$500.

With the introduction of modern sanitary equipment in the buildings, which followed soon after water service was available, the disposal of sewage became a problem. Cesspools were used for some years. Four large ones were constructed the summer of 1891

near the stream or stream-bed which cuts across the northeast corner of the campus. Their overflow was into that watercourse. The same year toilet rooms were provided for the principal buildings. These cesspools served until 1900.

LIGHTING

Improved kerosene lamps expressed the highest luxury in lighting available at the College until 1881, when a machine for producing gasoline gas was obtained by the chemistry department to



THE CAMPUS FROM ANDERSON HALL

This view from the roof of Anderson Hall was made sometime between 1891 and 1895. In the foreground it shows the chemical laboratory with new ventilating facilities, the newly added iron shop at the corner of the woodshop, the horticulture hall and greenhouse, the horticulture barn and residence for the president. In the background is seen the roof of the residence of the professor of agriculture, the remodeled "old barn," now Farm Machinery Hall, and the second stone barn and adjacent buildings.

replace alcohol lamps for laboratory heating purposes. At the same time fixtures were installed to light the lecture room and office. When the central section of the main building, later named Anderson Hall, was erected, provision was made for the same means of illumination, using the machine in the chemistry building. This was hardly adequate, and in 1885 a larger machine was purchased and placed in the basement of Anderson Hall. Later when the one in the chemistry building gave out, this was used for both buildings. In 1893 the College purchased an electric generator and four motors, and by the fall of 1894 the halls of the literary societies located in the east basement of Fairchild Hall were

lighted by electricity. Power was supplied to the iron-shop, wood-shop, and barn, and power and light to the printing department in the southwest basement of Anderson Hall. The use of electricity for lighting was extended as rapidly as funds permitted, Anderson Hall being completely supplied by 1897.

HEATING

Coal or wood stoves constituted the sole means of heating College buildings until the central part of the main building (Anderson Hall) was erected in 1882. Steam heating was provided for it, and the north wing at that time, and extended to the south wing when it was built. In 1884 provision was made for heating the



HEATING STOVE

This view is of a room in the third story of Anderson Hall in which instruction in telegraphy was given during its later years. It is introduced here chiefly to show a unit of the heating equipment such as was in general use in the buildings previous to the introduction of steam heat. Steam heating was introduced gradually and was practically completed by 1894.

horticulture building and the greenhouse connected, using hot water. In 1885, a steam-heating system was installed in the chemistry building, which also provided means of heating ovens, sand-baths, etc., and preparing distilled water. This left only the "old barn" or armory to depend upon stove heat. In 1893-94 a new and more comprehensive steam-heating plant was installed at an

expense of \$14,000 and a hot-water heating system provided for the greenhouses. A new engine room was built, and the first brick smokestack was erected at that time.

TELEPHONES

A telephone line was maintained between the office of the president of the College and that of the treasurer down town, beginning in 1883. A College telephone exchange was installed the summer of 1895 by Secretary Graham. This operated among departments with the central in the secretary's office.

LIBRARY AND MUSEUMS

The library of the College has always been inadequately supported by the legislature. A classic expression attributed to one of the state senators was to the effect that he did not believe that the faculty had read all the books that they already had in the library. During this administration varying amounts were allowed, reaching to \$1,000 a year. The provision for housing in Fairchild Hall was most serviceable and opportune. The northeast room on the first floor of Anderson Hall which the library had used from 1879 to 1894 was most inconvenient and inadequate. Progress was also marked by the appointment of a full time librarian in 1894 in the person of Miss Julia R. Pearce.

Space does not permit itemizing the additions to museums, collections, plantations, livestock, machinery, scientific apparatus, etc. Study of the presentations in the catalogue from year to year under the heading "Means of Illustration" shows the slow, but progressive, and in the aggregate large increase in this vital type of College property.

POLITICAL UNREST

In 1890 the People's Party was organized. It was colloquially called the Populist party, and was formed by the consolidation of various groups, the strongest at that time being the Farmers' Alliance. Dissatisfaction with economic conditions, which were attributed largely to the national monetary policy, was the cause of these organizations, and results amounting to a political upheaval followed. This recital will go no farther than to indicate the existence of this atmosphere, and its connection with the history of the College. The Populists believed that there was something radically wrong with the economic and social system then in existence, and that the state educational institutions should give more attention to study of the problems involved.



THE FACULTY 1892-93

In the election of 1892, the Populist nominees were indorsed by the Democrats, and the entire fusion state ticket was elected, Lorenzo D. Lewelling being chosen governor. The new Senate was Populist, but on the face of the returns the Republicans had a majority of the House. There was a prolonged contest on this matter, but it ended leaving the Republicans in power in the House. Conditions were such that little constructive legislation was possible. Governor Lewelling sent to the Senate for confirmation, appointments as Regents of the College: E. D. Stratford, Ed. Seccrest, W. D. Street, and Harrison Kelley. Joshua Wheeler and A. P. Forsyth held over until 1894, when C. E. Goodyear and C. B. Hoffman were appointed.

Considerable anxiety was felt in College circles concerning possible changes which the new Board might make. However, rather conservative counsel prevailed, and no changes in personnel ensued on this account.

LECTURES ON ECONOMICS

At the June meeting the Board provided that a series of weekly lectures on economic and financial questions should be given at the College during the fall and spring terms of each year, and that the short winter course of lectures for farmers should embrace an additional course. Eight lectures by seven different speakers were given Friday evenings in the course of the fall term. The *Industrialist* printed summaries of the lectures, which show that most, if not all, of them were on a high plane. A few of them were heard by large audiences, but student attendance and that of the general public, which was invited, were such that January 25, 1894, the Board took action as follows:

Whereas, the lectures in the economic course have not been well attended by students, therefore, resolved that the course be discontinued for the present with a view to establishing at some future time a lectureship on economic topics.

In accordance with this idea the Board, April 6, 1894, on motion of C. B. Hoffman, adopted a series of resolutions which are

FACULTY 1892-93 (Opposite Page)

Top row: B. Belle Little, Julia R. Pearce, Wm. Baxter, C. M. Breese, Grace Clark, W. L. House, A. C. McCreary, Enos Harrold, C. A. Gundaker.

Second row from top: J. T. Willard, F. H. White, F. A. Marlatt, Wm. Shelton, F. C. Burtis, C. C. Georgeson, E. R. Nichols, E. B. Bolton, N. S. Mayo, A. S. Hitchcock.

Third row from top: S. C. Mason, J. S. C. Thompson, O. P. Hood, I. D. Graham, D. E. Lantz, G. H. Failyer, E. A. Popenoe, J. D. Walters, O. E. Olin, A. B. Brown.

Bottom row: Elida E. Winchip, Nellie S. Kedzie, Geo. T. Fairchild, Alice Rupp, Josephine C. Harper.

quoted in full since they embody the Board's own statement of its position at the beginning of this highly controversial period.

Whereas, It is important that the agricultural classes, from the ranks of which the majority of the students of this College come, understand the economic laws which underlie all civilization, and

Whereas, The Board of Regents is of the opinion that less time and attention than the importance of the subject demands have been given to it, either in the regular course of study or in lectures on this and germane subjects, therefore, be it

Resolved, That thirteen lectures of one hour each be given during the fall and winter terms of each year on political economy, by some member of the Faculty or by some other competent person designated or employed by the Board of Regents. These lectures are to take the place of the Friday afternoon lectures heretofore given by the Faculty on various topics. They shall be distributed as may best suit the best interests of the Faculty and students, but shall all be given in the fall and winter terms.

These lectures shall treat of the subject (political economy) consecutively, commencing with the primary concepts of the science, treating fully and dispassionately the various economic and social problems.

These lectures shall be non-partisan, but shall not ignore nor unfairly treat the positions taken by what is commonly known as the new school of political economists. The principles maintained by the advocates of land nationalization, public control of public utilities, and the reform of the financial or monetary systems shall be fairly stated and candidly examined, with a view of leading the student to grasp the principles involved in the science of production and distribution, without bias or prejudice.

PROF. THOMAS E. WILL APPOINTED

The leave of absence granted Professor Nichols for the year 1894-95 facilitated the employment of an additional professor to give the series of lectures on economics that was planned. Economies were possible in providing temporarily for Professor Nichols' work. July 18, 1894, the board chose Prof. Thomas E. Will, of Boston, Massachusetts, to be professor of political economy.

Professor Will gave the course of thirteen lectures required by the Board, Friday afternoon during the fall and winter terms,

alternating with public rhetorical exercises presented by divisions of the third-year and fourth-year students. Attendance upon these lectures and other exercises was compulsory for students. The lectures were clear presentations of some of the fundamental agencies of the economic life of society and their inter-relations.

A course of lectures was given by Professor Will in the college year 1895-96, under similar conditions. These treated certain special topics in economics at greater length, two or three lectures being used for each, if needed.

CONSTITUTIONAL DEFECT AND THE REGENTS

Under the constitution of the State of Kansas, the term of a governor begins on the second Monday of January, and the legislature meets on the second Tuesday. This sounds straight, but when January begins with a Tuesday, the second Tuesday comes six days before the second Monday, and a legislature may be in session for that length of time before a new governor attains power, instead of meeting the next day after his inauguration. This defect in the constitution has changed the course of history in some minor respects.

In April, 1894, the term of office of Regents Forsyth and Wheeler expired, and recess appointments were made by Governor Lewelling, who named C. B. Hoffman and C. E. Goodyear as their successors, respectively. The legislature not being in session, these could not be confirmed at the time. In the election of 1894, the entire Republican state ticket was elected, but there was no election of senators as their terms were from 1892 to 1896. In January, by reason of the peculiarity of the constitution described, the legislature met before the new governor, E. N. Morrill, was inaugurated. This gave Governor Lewelling an opportunity to send the names of Messrs. Hoffman and Goodyear to the senate. He did so, and they were confirmed, their terms expiring April 1, 1897. In this way the old governor exercised power that ordinarily would have come to the new governor. Had it so come that year, Governor Morrill undoubtedly would have appointed Republicans instead of Regents Hoffman and Goodyear. For the three-year terms beginning April 1, 1895, he appointed C. B. Daughters and C. R. Noe, who served three years. They replaced Regents Secrest and Stratford. He made recess appointments of S. J. Stewart and A. P. Riddle, effective April 1, 1896.

A NEW BOARD OF REGENTS

The election of 1896 restored the Populists to power, and Hon. J. W. Leedy was elected governor. In February and March, by

arrangement of the proper authorities, Prof. Thomas E. Will spent most of his time at Topeka looking after the interests of the College in pending legislation. He prepared a report for the *Industrialist* of March 22, 1897, which gives a vivid picture of the legislative difficulties of the winter. His version of the situation in respect to the law reorganizing the Board was not accepted by everyone as adequate.

The legislature enacted a new law in respect to the Regents of the College. The president of the College was deprived of his *ex officio* regentship and replaced by a seventh appointive Regent. The term of office was extended from three years to four. The plan, after preliminary fractional terms had worked out, was that four four-year terms should begin April 1, 1897, and three four-year terms April 1, 1899.

Governor Leedy reappointed Regent Hoffman, whose term would expire April 1, 1897, and Messrs. Harrison Kelley and J. N. Limbocker, and Mrs. Susan J. St. John, widow of the former governor, to the four four-year terms beginning April 1, 1897. Hon. T. J. Hudson was appointed for a two-year term. No attempt was made to oust Regents Daughters and Noe from their positions, and they held office until April 1, 1898. The newly constituted Board thus included four members who had been confirmed for four-year terms, apparently insuring stability for that length of time for any changes that the Board might make, or policy that it might inaugurate.

ENTIRE FACULTY REMOVED

The Board of Regents met April 6, 1897, with all members present. Harrison Kelley was elected president, Susan J. St. John, vice-president, C. B. Hoffman, treasurer, and T. J. Hudson, loan commissioner. Business of a general character was transacted, and the usual joint meeting with the Faculty was held in two sessions in which reports and recommendations of department heads were presented in considerable detail.

April 7, Regent Hoffman offered resolutions which he amended the next day by substitution of the following:

Resolved, That the "school year" as employed in the act entitled "An Act, etc." shall begin July 1st of each year, and end June 30th of the following year; and that the term of employment of all the present employees shall expire June 30th, 1897.

Regent Daughters made an effort to amend this resolution, but it was adopted. This action discharged the entire faculty, and any

subsequent references to this separation as "resignation" is purely euphemistic, by whomsoever it may be made. The Board as re-organized in 1873 requested the resignations of all members of the faculty, and had they not tendered them, discharge would doubtless have followed, but this Board of 1897 did not use such round-about proceedings.

The Board based its action on Section 3 of the law referred to, reading in part as follows: "The Board of Regents of the Kansas State Agricultural College are hereby empowered and authorized to employ professors to fill the various chairs said Board of Regents may establish and maintain, and also to employ instructors, assistants, and foremen of the various departments at salaries for each school year not exceeding the following schedule, to wit:" Here followed a list of 38 positions with the maximum salary permitted in each case, and certain other provisions. It will be seen that the law had been well framed for the accomplishment of the purpose for which it was used.

FAIRCHILD DECLINES TO BE CANDIDATE FOR RE-ELECTION

The next morning, April 9, 1897, President Fairchild was given permission to make a statement. He did this orally, but for the minutes prepared the following paragraph:

To the Board of Regents:

In view of the resolution of yesterday terminating the employment of all the employes on the 30th of June next, I feel most seriously the danger to the continuity of the College, unless immediate action is taken with reference to re-employment of such members of the present Faculty as may be acceptable. I therefore urge such action now, and, in order to free the Board from embarrassment on my personal account, I hereby decline to be a candidate for the Presidency, and cannot conscientiously accept re-election if tendered.

George T. Fairchild.

WILL ELECTED TO THE PRESIDENCY

By this removal of himself from the field, the Board was left with no reason to defer reconstruction of the faculty. Its first step was to make Professor Will president. He had been in the faculty four years, and through attending the weekly meetings of the faculty and participation in its discussions had become well acquainted with the existing situation, and with the characteristics of the other members. During this time there had been earnest

debates upon a request of the Board that a place in the curriculum be found for additional work in economics. The faculty had met this only in part by providing for electives in connection with an extension of the course to five years. As probably only a small minority of the students would go to that expense to obtain the instruction desired, the objects of the Board were not really met by this arrangement.

Professor Will by these and various other contacts through these years had had ample opportunity to form a judgment in respect to the several members of the faculty, and especially in respect to the probability of their working with him in a reasonable degree of harmony. He knew that most of the older members would not be likely so to cooperate. One of these, when the news came that Professor Will had been elected president, stated flatly to others that that settled it for him—he would not stay.

There can be no reasonable doubt that the wish of President elect Will determined in most cases whether or not an individual would be invited to remain in service under the new administration. Persons under favorable consideration were asked whether they could work in harmony with the new regime, but were not asked to assent to any particular political or economic doctrine. At this April meeting ten were definitely eliminated, and four were left in uncertainty and were dropped from consideration in June. Of those re-elected, three, Mrs. Kedzie, Mrs. Winchip, and Miss Grace Clark, the president's stenographer, declined to accept employment under the Board.

This wholesale permanent removal of faculty and employees was unprecedented in the State, and nothing approaching it has occurred since. No matter how earnestly, nor indeed how sincerely, the Board might attempt to justify its action, it was judged by the opposition as political in basis, and a fight was excited that continued throughout the administration of President Will.

SCHOOL YEAR TO BEGIN JULY 1

Previous to this time the college year in respect to terms of employment of faculty members began September 1 each year, and ended August 31 the next year, salaries being paid in twelfths, even though the officer might have no definite summer duties. The action of the Board making the "school year" begin July 1, and terminating the period of employment of all employees June 30, was expected to cut two months' salary off for all who were not re-engaged. Thirteen of the faculty and employees gave the Board formal notice that they stood ready to perform their duties in the

College up to September 1, 1897, and that they would expect compensation for the full year in accordance with their contracts. Payment was refused for a time but was finally made without a lawsuit which was threatened.

The net immediate effect of the Board's action in adopting the logical practice of having the college year coincide with the fiscal year was to give all new members of the faculty full pay for July and August although their service might not begin until September, and old members of the faculty who were re-elected received double salary for July and August.

PUBLIC RESPONSE TO BOARD ACTION

No other act by any Board of Regents in Kansas ever aroused public attention as did this wholesale revolution in the faculty personnel. Scores of columns of comment were printed. With rare exceptions these comments were highly uncompromising in their expressions, and the position taken in any case was determined by the political affiliation of the commentator. Very few outside of the College group possessed any real knowledge of the case upon which to base an opinion, and alleged discussion was in general an effort at rationalization. It was abundantly demonstrated that a Board consisting of members who were selected because of their known attitude on disputed political questions could not convincingly put in effect a faculty reorganization that would be generally recognized by the other party as non-partisan in character.

The excitement on the campus and in Manhattan, among citizens, faculty members, students, and alumni, reached a height never attained before nor since. On the suggestion of President Fairchild, Regent Hoffman addressed the student body at the morning assembly, Saturday, April 10. He spoke extemporaneously, and there is no stenographic record of his remarks. Very shortly afterward persons who heard him differed materially in their recollection of what he said. At best the speech had no effect on public feeling.

In response to persistent public rumor the following resolution, presented by Regent Hoffman, was adopted:

Whereas, statements to the contrary have been and are being industriously circulated, the Board of Regents hereby expressly declare that Prof. Will is in no sense responsible for the amendment to senate bill No. 547, whereby the president of the College was deprived of his regency; that he did not instigate or suggest the removal of President Fairchild from the presidency of the College; that Prof.

Will was not an applicant for the presidency of the College, and that at no time has he even suggested his desire or willingness to occupy the office of president of the College until directly interrogated by members of the Board at the present session.

This statement also probably had very little public effect. Perusal of a voluminous scrapbook compiled at that time shows that nearly all newspapers maintained partisan attitudes, and since the real planning of the period was personal, and orally conducted, it never was possible for the whole truth to be obtained for publication. Further mention is made later concerning the printed controversies of the administration of President Will.

FAIRCHILD'S POISE

During this period none maintained a better poise than President Fairchild. In an address made in 1903 at the dedication of a memorial window in the Congregational Church of Manhattan the present writer said in part:

Nothing tests the greatness of a man like adversity and injustice, and at no time did the character and personality of President Fairchild stand revealed in greater strength and majesty than during the trying days and weeks six years ago. In the excitement and anxiety he was the least affected. He felt that his work had been well done; that the last few years had been ones of worry, and that what was best in the College as he left it would endure. While lesser men were wrought up to feverish and unjust denunciation, he was calm and judicial; while enemies were vilifying him he was accounting for their attitude. At commencement time the Alumni Association held a special farewell reunion which is fadeless in memory, and here, as always, President Fairchild was strong, serious, gentle, and self-contained. While others wept in grief he stood composed, happy in the consciousness of the love and respect of the scores assembled; happy in the belief that good would work out of seeming ill, and without a word of bitterness on his lips or in his soul. Surely he approved himself not only a good man but a great.

He is gone. Some never saw that kind, strong face again. Today we meet in unity of heart to dedicate a beautiful window to his memory, fit symbol of the beauty, clarity, and purity of his soul; but for those who enjoyed the precious privilege of his friendship no other memorial can

compare with that wrought in intellects stimulated to a greater love of truth, in hearts made more deeply sympathetic, and in souls inspired to greater reverence for the eternal verities.



THOMAS E. WILL

Economics, 1894-1899; philosophy, 1897-1899. President, 1897-1899.

CHAPTER VI

THE ADMINISTRATION OF THOMAS ELMER WILL

JULY 1, 1897, TO JUNE 30, 1899

PRESIDENT Elect Will found himself very busy with executive work for more than two months preceding his assumption of the full duties of the presidency, July 1, 1897. To enable him to do this, he was given the reception room as an office. This was across the hall from the president's office and has been the president's front office ever since. The room used by President Fairchild was soon taken over by the secretary of the College, later designated as registrar, and is still (1939) used by that officer.

Professor Will was also given a full-time stenographer, Mr. Wm. C. Lee, and conducted a voluminous correspondence in the selection of personnel for filling the vacant positions in the faculty. A college president is rarely called upon to choose one-half of his faculty in so short a time.

SELECTING A FACULTY

In the choice of members of the faculty proper, there is no basis for a charge that party politics had any important influence, though in respect to persons for a few subordinate places this cannot be said. President Will undoubtedly insisted upon competence in his appointees, and in the retained members of the old faculty. He, and the Board of Regents doubtless also, intended that in the members who taught history, sociology, and economics, the point of view which the majority of them held should be sympathetically presented, but other aspects were not excluded. The men chosen for these fields of instruction were scholarly, and, while favoring extension of governmental social control, were not radical in their beliefs. Extreme views on the money question were not held, and that most typical feature of populism received little or no advocacy. In general, students considered that the teachers tried to be fair. Of course any man with convictions on a subject must necessarily present conflicting views in the way that he knows them, and these will tend to bring others to the same conclusions as those to which he has arrived, and will seem to be impartially presented.

In addition to assembling a large fraction of the faculty, the president elect had to attend to the issuance of the college cata-

logue, and this involved making some changes in the curriculum. For this purpose two meetings were held of the members of the faculty who had been retained. Curricular changes made at that time were not very radical. The work of the fourth year was differentiated to a greater extent for "farmers," "mechanics," and "women," and two additional terms in economic science were required. Provision for this was made by elimination and condensation of other subjects. These faculty meetings were entirely friendly and cooperative. No new appointees were present.

A NOTABLE MEETING OF THE BOARD

A meeting of the Board of Regents was held June 30 to July 6, 1897. Harrison Kelley, president of the Board, was seriously ill, and unable to be present. He died before the end of July. Fixing of salaries and considerable other business was transacted June 30 and July 1. The next day Regent St. John was absent in accordance with a previous announcement of her plans, and Regents Noe and Daughters had left. Though without a quorum at any of the three sessions of July 2, the three remaining members, Messrs. Hoffman, Hudson, and Limbocker, proceeded with the transaction of business. The minutes do not show the lack of a quorum, but the fact was well known, and is recognized in the *Industrialist* for August 16, 1897. It was also recognized at the meeting of the Board, September 1, with five members present, when a special motion was passed "ratifying and confirming all that was done on said day, as recorded in the minutes," and ordering the action "to be recorded as the action of the Board of Regents."

The minutes of July 2, 1897, are very important and cover eleven large typewritten pages. Faculty positions were established and filled, and salaries fixed. The recommendations of the retained members of the former faculty concerning the curriculum and the requirements for the master's degree were adopted. It was also voted "that a course of lectures in social and economic science be given annually in the college chapel and that students be graded on the same." Action was taken on many minor matters, and a remarkable "Statement Relative to the Recent Reorganization of the Kansas State Agricultural College" was adopted and ordered published.

This statement was printed in the *Industrialist* for July 15, and also issued as a separate pamphlet, and was disseminated widely. It was a striking example of the controversial matter issued during the administration of President Will, who was so constituted that he could not refrain from making printed replies to any significant

criticism. Such action only perpetuated the controversy. Had he been content to leave unanswered the criticisms printed, and to devote himself to the local job of conducting the College, he, in the judgment of this writer, would have been undisturbed as president for four years, as the Board had planned, and very likely for several years more.

The "statement" could be treated judicially in detail only by the use of more space than is available here. It was a plausible, skillfully expressed, closely knit presentation of truth, half truth, and error in respect to the past, which can be analyzed only by one having a comprehensive knowledge of the antecedent facts and conditions. This was followed by a disclaimer of political incentives, a seriatim statement of educational improvements planned, and an assumption of profound regard for academic freedom.

THE NEW FACULTY

When the College opened September 9, 1897, the following-named new members of the faculty had been elected. Their names, with those of the old members, were printed in the *Industrialist* arranged in the alphabetical order of their departments as follows:

Henry M. Cottrell, M. S., Professor of Agriculture; Superintendent of Farm
 George F. Weida, Ph. D., Professor of Pure Chemistry
 Edward W. Bemis, Ph. D., Professor of Economic Science
 Frank Parsons, B. C. E., Professor of History and Political Science
 E. E. Faville, M. S. A., Professor of Horticulture and Entomology; Superintendent of Orchards and Gardens
 Mrs. Helen Campbell, Professor of Household Economics; Superintendent of Domestic Science Departments
 Miss Mary F. Winston, Ph. D., Professor of Mathematics
 Lieut. Ralph Harrison, Professor of Military Science and Tactics
 Fredric A. Metcalf, O. M., Professor of Oratory
 Paul Fischer, M. V. D., Professor of Veterinary Science
 Charles S. Davis, Superintendent of Printing
 Miss Louise Hochleitner, Superintendent of Sewing

Biographical sketches and portraits of most of the new appointees were printed in the *Industrialist*, July to September, 1897.

Of the old members of the faculty, Thomas Elmer Will had become president, and was also professor of economics and philosophy. Other members were re-employed as follows:

Albert S. Hitchcock, M. S., Professor of Botany



FACULTY 1897-98

Top row: F. A. Metcalf, G. F. Weida, E. W. Bemis, O. E. Olín, J. D. Walters, I. D. Graham, A. S. Hitchcock, H. M. Cottrell, Frank Parsons, C. S. Davis.

Bottom row: J. T. Willard, O. P. Hood, A. B. Brown, Harriet Howell, Alice Rupp, Thos. E. Will, Josephine C. Harper, Mary F. Winston, Helen J. Wescott, E. R. Nichols.

Julius T. Willard, M. S., Professor of Applied Chemistry
Oscar E. Olin, A. M., Professor of English Language and Literature
John D. Walters, M. S., Professor of Industrial Art and Designing
Ozni P. Hood, M. S., Professor of Mechanics and Engineering; Superintendent of Workshops
Alexander B. Brown, A. M., Professor of Music
Ernest R. Nichols, D. B., B. S., A. M., Professor of Physics
Ira D. Graham, A. M., Secretary; Professor of Bookkeeping, Commercial Law, and Accounts
Miss Alice Rupp, Instructor in English
Miss Josephine C. Harper, Instructor in Mathematics
Miss Julia R. Pearce, B. S., Librarian

The assistants, foremen, and other officers listed in the *Industrialist*, seventeen in number, were nearly all held over from previous employment by the College either by formal appointment or as students. Exceptions were Miss Helen H. High, assistant in sewing, and Percy J. Parrott, Experiment Station assistant in entomology. Miss High served one year. Mr. Parrott after three years of excellent work went to the faculty of Cornell University, in which he has had a distinguished career.

CATALOGUE

The College catalogue for 1896-97 was prepared on the general plan of those issued for the immediately preceding years, but omitted the list of the faculty for that year, and gave only the names of those who had been provided for the next year, 1897-98. These were shown on pages 4 to 7, with no indication that the presentation was an announcement rather than a record. On the publication of the catalogue with this misleading feature, one or more members of the old faculty made a protest to President Will, and he made some reparation by providing a two-leaf folder paged 4a to 7a which was laid in the catalogue, and showed the names of the faculty for 1896-97. As this folder was loose, it was readily lost, and students of College history need the foregoing information when making any research involving membership in the faculty during that period.

ADMINISTRATIVE CHANGES

In taking up the local institutional routine work, President Will made greater use of committees than had his predecessor. Some new committees were established, among these a committee on as-

signments. Professor Walters undoubtedly stood higher in the confidence of President Will than did any other of the members of the old faculty, and was made chairman of this key committee, which took over work that President Fairchild had, with clerical help, done himself. For some years the number of students had been too large for any one person properly to attend to the term to term details of their work, and the creation of this committee was a progressive step. It has remained ever since as one of the most important parts of the administrative organization.

Absences of students up to this time had been handled by the president and faculty. A committee on absences and tardinesses was established, which worked out a system of operation approved by the faculty. This included presenting to his teacher by the student a written explanation of the reason for any absence. This excuse was to be transmitted by the teacher to the committee, and action was taken by the committee. This procedure provided consistency of action without burdening the executive.

In respect to committee action the faculty voted that, unless otherwise ordered, in all cases referred to committees they have power to act, their action to be reported to the faculty. Previously committees had practically always been required to report recommendations to the faculty, and final action was by the faculty. The change was from democracy in the faculty toward bureaucracy. Gradually, it came to pass that reporting to the faculty was not always observed.

MEETINGS OF THE FACULTY

For the greater part of the year 1897-98, meetings of the faculty were held weekly as had been usual, and these served a very useful purpose. Thorough-going discussions took place in respect to institutional procedure, and changes made were usually founded on reason and efficiency. The new members of the faculty brought the results of experiences elsewhere, and these met comparison by the old members with conditions and practices here. The meetings were characterized by consideration and dignity, and there were no direct clashes between the old members and the new. By spring, matters of procedure were well agreed upon, and a motion was passed by which faculty meetings were to be held only on alternate Saturday afternoons. This action killed the faculty meeting as an instrument of democratic control of the College.

A weekly faculty meeting with free discussion of the many questions, trifling or important, that arise in the local administration of the college is the most effective creator of faculty unity and

institutional loyalty. The adequate debate of a question by intelligent persons tends to bring about agreement in respect to it. To many faculty members, consideration of such questions is irksome, and a similar attitude toward state and national questions displayed by millions of citizens constitutes the dry rot of democratic national government. When faculty members relinquish their power, heads of departments, chairmen of committees, deans, and presidents must of necessity succeed to it. The work may be more economically done that way, but for the rank and file, intelligent judgment upon action taken becomes impossible, and captious criticism inevitably ensues.

NEW CURRICULA

Probably the most important work of the newly constituted faculty was the further revision of courses and curricula. Details cannot be included here, but the result was that four distinct curricula were prepared which in the next catalogue were designated as "Agricultural," "Engineering," "General," and "Household Economics." Each of these was worked out by a well chosen committee representing all lines of study combined in the curriculum. The work was so far advanced by late autumn that arrangements were made to put the first three named into effect at the beginning of the winter term, and adaptations of the new to the old were made for the several academic classes.

At the opening of the winter term each student could make a choice in respect to the curriculum which he wished to follow. Previously all students then in attendance had been enrolled in the single general curriculum. After enrollment for the winter term, Professor Walters reported that nothing definite could be said concerning the choices of preparatory and first-year students; but that of the second-year men, 12 had chosen the agricultural, 23 the engineering, and 48 the general, curriculum; for the third-years, the figures were 14, 9, and 21; and for the fourth-years, 16, 7, and 19, respectively. These statistics show that under the old curriculum there was a steady growth in the interest in agriculture.

A minor extension of the instructional features of the College was the authorization of acceptance of apprentices in the shops. These received no wages and paid no fees. Service rendered was regarded as offsetting the expense of instruction. The Board assented to the plan October 22, 1897. April 14, 1904, it voted that no more apprentices be received. In the meantime the system had extended to printing and to dairying. The maximum enrollment of 87 was in 1901-02.

GRADUATE STUDY

Enrollments for graduate work were much higher during the two years of this administration than during the two years immediately before or after, being 46 in 1897-98, and 57 in 1898-99. Comparatively few of these were in courses leading to the master's degree, but ten such degrees were conferred each year. The requirements for this degree adopted in 1897 were not materially different from those in force previously, the main changes being that the sciences approved were not named, and that credits might be from a group of sciences instead of from a single one. Hence, theoretically, choice was less restricted. Furthermore, economics was classified as a science.

THE TUBERCULOSIS EPISODE

One of the prominent early events of this administration was the tuberculosis episode. The barest statement of probabilities and facts is possible here. To a certain extent tuberculosis had probably existed in the College herd for many years. Animals of very fine appearance might be affected. According to a statement in the *Industrialist* written by Prof. H. M. Cottrell, and one by Prof. C. C. Georgeson printed in the *Kansas Farmer*, a few cases were known to have existed previous to 1894, and there were traditions of others. The tuberculin test for tuberculosis in cattle had not yet won universal acceptance. Professor Georgeson requested permission to test the entire herd. January 25, 1894, the Board authorized Doctor Mayo to test five suspected animals, and to slaughter two if strong indications of the disease were found. The test was made, and only one reacted. It was killed February 24, 1894, and the post mortem confirmed the test. Within the next two and one-half years four other cases were detected. Thus, by the fall of 1896, at least seven or eight cases of tuberculosis had been known.

On the joint request of Professor Georgeson and Doctor Mayo, the Board, September 29, 1896, authorized the tuberculin testing of the entire herd and the separation of any animals affected until the next meeting of the Board. The test was made, and eighteen animals of the fifty-two in the herd responded to the test. All but one of these were mature animals. This was reported to the Board, and January 13, 1897, it was voted that the affected animals should be kept separate from the others.

Professor Georgeson, orally in the January, 1897, joint meeting of the Board and the faculty, and in writing in his annual report for the year ending June 30, 1897, recommended that the affected animals be maintained entirely separate from the others, and used experimentally in study of the question of transmission of the dis-

ease from affected animals to their offspring, with reference to the possible safe retention of valuable cows for breeding purposes.

The Board took no further action until September 3, 1897, when it adopted the recommendations embodied in a long report by its committee on agriculture. This included a reference to ascertained conditions in the herd without disclosing that these had been known for months. Among the recommendations were: That diseased animals be disposed of, the barn and lots purged of disease, college milk not be used for any purpose, students and employees be prevented from sleeping in or near the barn, persons living in the drainage area below the barn be notified of possible danger, and no purchases of cattle, hogs, or sheep be made until tuberculosis had been eradicated from the College farm.

The Board also provided for an additional examination and test of the herd to be made October 20 by the professor of agriculture and the college veterinarian with such assistance as they might desire and select. This examination was made by Dr. James Law of Cornell University, Dr. T. A. Geddes of the Bureau of Animal Industry, and Dr. Paul Fischer, professor of veterinary science at the College. The fourteen animals which Dr. N. S. Mayo had found to react for tuberculosis again responded positively to the tuberculin test. On recommendation of these veterinarians the Board ordered the slaughter of the affected animals. This was done, and all the carcasses were burned. More than 200 veterinarians, physicians, newspaper men, public officers, farmers, and others witnessed the proceedings. The cattle found unaffected were removed to an uninfected pasture and sold at public auction November 18, 1897.

The entire tuberculosis episode was the subject of voluminous and partisan discussion in the local and state press. On the one hand the old management was charged with criminal neglect, and on the other it was alleged that the new management created spectacular situations that were not warranted by the facts or the interests of the College or the public. A detailed analysis of this case cannot be made here.

The *Industrialist* for June, 1898, recorded that "Three hundred pounds of sulphur were burned in the barn Saturday night to disinfect the building of germs, insects, and mice."

DEVELOPMENT OF DAIRYING

Prof. C. C. Georgeson in his report for the biennial period ending June 30, 1894, recommended "a dairy building and creamery, for instruction and experiment," believing that it would be of great value to the state and the College. In 1896 he renewed his representations at greater length. Prof. H. M. Cottrell succeeded Pro-

fessor Georgeson as professor of agriculture and superintendent of the farm, September 1, 1897. He had been an assistant in the department, 1888 to 1891, and had followed this by six years' experience as manager of Vice-President Morton's dairy farm. He at once entered upon an effort to establish a dairy school here. The Board provided for the initiation of such instruction for private dairy-men, and receipts from sale of the College purebred stock were used in part to finance the project. Apparatus was purchased, and limited quarters in the barn were provided for the work. To provide milk for the school, twenty grade cows were bought in Lincoln County. These were tested for tuberculosis, and two were found to be affected and were killed. Six students were enrolled in the school.



EDUCATION HALL

This building was erected for the farm department in 1900. After the agricultural departments moved to Waters Hall in 1913, it was used by the vocational school, and in 1924 was taken over by the department of education. It also houses the department of public speaking.

Professor Cottrell inaugurated an active campaign for the creation of public sentiment in favor of the erection of a building for dairy purposes, and with such success that the legislature of 1899 appropriated \$25,000 to provide an agriculture building, a large part of which was to be used for dairy manufactures. A wooden barn for housing the dairy stock was also provided at a cost of \$3,000. These were erected in 1899-00. The barn has been razed, but the Agriculture Building is now (1939) used as Education Hall.

HOME ECONOMICS

The legislature of 1897 appropriated \$16,000 for a domestic science building. The plans for this structure had been drawn by Professor Walters, in consultation with Prof. Nellie S. Kedzie and Mrs. Elida E. Winchip, and its construction began early in June, 1897, and was completed in time for use the winter term. The equipment included provision in the basement for furnishing lunches to students and members of the faculty. These lunches were available at ten cents each. A ticket for twelve cost one dollar, and a liberal patronage resulted. In the fall of 1898, 21 meals a week were offered for \$1.75. This was a great expansion of the plan for use of incidental kitchen laboratory products employed by Mrs. Kedzie, and Mrs. Campbell found its organization and successful operation to be her chief satisfaction as professor of household economics.

Domestic Science Hall was dedicated January 6, 1899, a year after its completion, in elaborate afternoon and evening programs in which distinguished out-of-town speakers participated. June 20, 1902, the Board of Regents named the building Kedzie Hall in honor of Mrs. Kedzie.

THE BOOKSTORE

A new enterprise carried on by this administration was a bookstore. March 25, 1898, the Board voted to "establish a bookstore in which students' books and supplies be kept for sale; that such books and supplies be sold for cash only to students and employees of College at cost and expenses; that Prof. Walters be selected as purchasing agent for the College, and be given such assistance in the department of industrial art as will enable him to give the requisite time to the purchasing department." This went into effect July 1, 1898.

According to the *Industrialist*, it was estimated that the price of books and supplies would be reduced from five to fifty percent. The *Industrialist* for January, 1899, contains this item: "The cash sales of the bookstore for the first two months amounted to \$1,209.30, and the sales to the different college departments to \$194.20. The pay roll expenses were only \$13.65, or less than one percent of the value of the goods handled." No estimate was published concerning the actual saving to students.

However, it must not be overlooked that this very favorable statement takes no account of rent, heat, and light furnished by the state, nor of the salary of Professor Walters, much of whose time was required, nor of depreciation of inventory due to initial

or developed unsalability of goods. The bookstore was warmly approved by the students, and as warmly disapproved by the local book dealers.

CHANGES IN THE FACULTY

The changes in the faculty that took place in the course of the two years of the administration of President Will were rather numerous for so short a time. The first to leave was Miss Louise Hochleitner, superintendent of sewing. In her letter of resignation she said: "I find my work so heavy that I am unable to do justice to myself and my pupils." Privately she had no hesitation in stating "that she could not stand it to be bossed by Mrs. Campbell." Miss Hochleitner served only one month. Miss Harriet Howell succeeded her October 22, 1897, and had no friction with Mrs. Campbell. She served until June 30, 1902. The superintendent of sewing was made independent of the professor of household economics, September 21, 1898.

Miss Julia R. Pearce resigned the librarianship March 31, 1898, and was succeeded by Miss Helen J. Wescott, who served from April 1, 1898, to May 31, 1899. Miss Wescott resigned on account of ill health, May 31, and died August 26, 1899.

Mrs. Helen Campbell found her duties in a somewhat unfamiliar field very heavy, and because of illness was unable for some weeks in the winter to attend to them. Effective March 31, 1898, she resigned the professorship of household economics because while carrying its burdens she was unable to give to her literary work the attention that she wished to apply.

Miss Minnie Ava Nellie Stoner was employed to succeed Mrs. Campbell, beginning July 1, 1898, her title being professor of household economics, superintendent of the domestic science departments. She remained into the next administration, her title, 1899-00, being changed to professor of domestic science, dean of women's department. This was the first appearance of the title "dean" and was a sort of formal recognition of a general advisory function exercised by the women in this position from 1875. However, for 1900-01, Miss Stoner was designated simply as professor of domestic science. She resigned, effective June 30, 1901, and accepted a similar position in Ohio State University.

The connection of Prof. O. P. Hood with the College ended officially June 30, 1898, but he had leave of absence without salary from June 9. He resigned to become professor of mechanical engineering in the Michigan College of Mines. His leaving was recognized by the Board as a distinct loss to the College. He was succeeded August 27 by Joseph D. Harper, who remained with the

College as professor of mechanics and engineering until February 1, 1901, when he resigned to enter commercial life.

Prof. Oscar E. Olin, professor of English language and literature, resigned July 1, 1898, to accept a position in Buchtel College, later the Municipal University of Akron, Ohio. His leaving was greatly regretted by the students, as he was one of the most beloved men and effective teachers that the College has ever had. He created a similar place of esteem in his new location, where he served for thirty-two years.

Professor Olin was succeeded by Dr. Duren J. H. Ward, a thoroughly trained scholar and competent teacher. He had interests outside his department, and was esteemed by his students. He served only for the College year 1898-99.

Secretary I. D. Graham, who had been connected with the College since 1879 and had served aggressively and ably in various capacities, resigned August 31, 1898, to participate in operating a business college. In later years he has been almost continuously identified with agricultural work.

February 8, 1899, Wm. H. Phipps, a graduate of the College and a member of the Board of Regents, was elected secretary of the College and entered upon his duties February 20. He served only until June 30, 1899, but deserved a better fate.

The heavy demands made by the administration upon Professor Walters for extra-departmental service resulted in the establishment of the chair of graphic mathematics, and the election of Dr. Arnold Emch to assume it. He began his work September 1, 1898, and served until June 30, 1899, when the chair was discontinued, and soon after Doctor Emch went to a position in the University of Colorado.

Better coordination of the preparatory work given in the College at that time, and improvement of its quality, were sought in the appointment of a principal of the preparatory department in the person of S. N. Chaffee, an experienced teacher in the common schools. His employment was limited to the academic year 1898-99.

The professor of horticulture and entomology, E. E. Faville, resigned January 1, 1899, to become president of the National Farm School at Doylestown, Pennsylvania. His leaving was regretted by the administration, and a successor was not chosen immediately. The work in horticulture was placed in charge of W. L. Hall, the assistant horticulturist, and that in entomology was carried by P. J. Parrott, assistant entomologist, with no depression of standards or results. Mr. Parrott remained until August 15, 1900, but Mr. Hall's connection with the College ceased June 30, 1899. He accepted a position in the United States Department of Agriculture.

On account of the war with Spain, Lieut. Ralph Harrison, May 12, 1898, was ordered to duty in the army, and for some time thereafter the military training of the students was in charge of student officers. J. G. Haney, a senior student, conducted the drill the fall of 1898, and R. B. Mitchell, cadet major, was acting commandant from January 6 to August 31, 1899.

PHYSICAL EDUCATION

In the field of physical education the situation in respect to athletics for men remained, 1897 to 1899, about as it was during the years immediately preceding, but interest in football, baseball, and track sports grew, while that in the gymnasium seemed to wane. For the first time a paid coach was employed the fall of 1897, Mr. A. W. (Jub) Ehram, previously of Baker University. For the football season of 1898, Mr. O. K. Williamson, a University of Kansas man, was employed. In intercollegiate games the faculty found it difficult to enforce observance of the regulations in respect to participants. A field day was conducted May 8, 1899, with contests in fifteen events. The results were published in the *Industrialist* for June. In January, 1899, a committee accompanied by Professor Metcalf appeared before the Board of Regents and presented a request for an appropriation for the purchase of a considerable amount of apparatus. The Board voted to ask the legislature for \$500.

Professor Metcalf held definite views on the connection between physical education and oratory, and he and Mrs. Metcalf did important promotional work in calisthenics for the young women. Mrs. Winnifrede W. Metcalf in October, 1897, was employed by the hour to give instruction in calisthenics, and for 1898-99 she was a regular member of the faculty and instructor in oratory and calisthenics. Professor and Mrs. Metcalf were very popular, and petitions in behalf of them and their work were presented to the Board by the students.

FINANCES AND APPROPRIATIONS

The financial situation during this administration did not show improvement. It was burdened by a deficit of the preceding administration amounting to \$7,385.73, June 30, 1897, although the legislature had appropriated \$10,000 toward meeting the existing deficiency. The legislature had also recognized the legitimacy of mounting expenses by appropriations of \$5,000 for the fiscal year ending June 30, 1898, and for the one ending June 30, 1899. The increases in the annual payments received from the Federal gov-

ernment under the provisions of the second Morrill act, that of 1890, amounted to \$3,000 for the two years.

Yielding to the temptations of numerous channels for useful expenditure was such that by June 30, 1898, the deficit had increased to \$8,102.04, and on June 30, 1899, was \$14,893.45. This amount was due on approved vouchers covering bills of commercial firms, and salaries of members of the faculty, for the latter part of the year. These remained unpaid until the legislature of 1901 made a special deficiency appropriation to meet them.

As President Will's administration was only two years in length, it could show but little increase in the physical plant. Domestic Science Hall was built with an appropriation made in 1897, and in 1899 an appropriation was secured for a building for the agricultural department and one for a barn for dairy cows. These were erected by the succeeding administration. Appropriations were also obtained in 1899 for equipment for the agricultural department, an addition to the shops, equipment for the mechanical department and the power plant, a sewer to the river, book stacks in the library, an enlargement of the greenhouse, and smaller amounts for many other purposes. The state appropriation toward current expenses was made \$10,000 for each year of the next biennium instead of \$5,000.

The College was in politics; the Populists were in control, and the Republicans expected to come into control. Each party posed as the friend of the institution, and the total appropriations for general purposes were probably larger than for any preceding year.

PRESIDENT WILL AND THE FACULTY

President Will by nature, training, experience, and practice was a student of books, and in debate on topics illuminated by such study he was a formidable contender. To meet him successfully, an adversary would have been obliged to go over the same detailed records that he had used. He lacked greatly in the ordinary man-to-man contacts of life, did not mingle congenially with his colleagues, and was sadly lacking in a sense of humor. A joke by him was a very rare product, but he was a good teacher and well liked by most of the students.

Aloofness from the everyday affairs of the common man and the average professor made President Will a bad judge of persons and situations, and this was reflected in some of his choices of helpers. It also led to an increasing tendency to avoid personal conferences, substituting written notes embodying executive decisions which might be based on very imperfect knowledge. An

adviser who never had shown any interest in general procedures of the College could not over night become a wise counsellor in administrative problems.

In a very few months the lack of touch between the president and members of the faculty both old and new began to create dissension. The Board of Regents attempted to support the president by adopting the following resolution introduced by Regent Hudson, March 25, 1898:

Resolved, that the faculty and the experiment station council stand to the President of the College in the relation of advisory bodies, and that if questions arise between the faculty, the experiment station council, or the committees of either, on the one hand, and the President of the College on the other, the decision of the latter is final, subject to appeal to the Board of Regents.

This from a Board which had charged President Fairchild with being an autocrat! President Will was a natural fighter on paper. He had not learned the essential function of personal conference in creating support and making friends, nor the justice, as well as success as a policy, of attaining one's chief ends by compromise on details.

Information of this action was not communicated to the faculty or the Experiment Station Council, but the fact leaked out, and it had a deleterious effect. Obviously, consideration of questions by a member of the faculty, and coming to conclusions, were regarded as comparatively needless, if at best they were to be only advisory. This resolution also served as a basis for executive action without conference, which occurred frequently, and did not build up support for the president.

The Manhattan newspapers, especially the *Mercury*, Democratic, edited by Jeff. J. Davis, and the *Nationalist*, Republican, edited by H. A. Perkins, kept up their unfair and often ignorant attacks and defenses, mostly with personal or partisan ends in view rather than the welfare of the College. The *Republic*, Populist, was less conspicuous in the controversy, especially after its editor, A. A. Stewart, was appointed superintendent of the School for the Deaf in July, 1897, and sold the paper in May, 1898.

POLITICAL TACTICS

The death of Regent Kelley in July, 1897, had broken the quartette which had expected to maintain for at least four years the domination of the new regime, and even within this group Mrs. St. John was often found lacking in subserviency. Regent Hoff-

man furnished the planning mind, and Regent Limbocker the astute local administrative connection with Manhattan.

The administration of Governor Leedy did not strengthen the cause of fusion between the Populists and the Democrats under which he had come into power, and he was defeated in the election of 1898 by W. E. Stanley. The Republican press at once assumed that Governor Stanley would have and would use the power to appoint four Republican Regents, and that the end of the Will administration would come in due course the next June. The term of Regent T. J. Hudson would expire April 1, 1899. Geo. M. Munger, who had been appointed for the unexpired term of Regent Kelley, deceased, had not been confirmed by the senate. The terms of Regents Daughters and Noe expired April 1, 1898, and E. B. Cowgill and Wm. H. Phipps were appointed their successors to serve one year. Mr. Cowgill was editor of the *Kansas Farmer* and declined the appointment on the ground that he believed that he could do more for the College as editor of his paper if he were not a Regent. This place on the Board remained open until Governor Stanley appointed Wm. Hunter, March, 1899, for the period ending April 1, 1903. Mr. Phipps was the first alumnus of the College to become a Regent. His appointment was a recognition of the dairy and creamery interests of the state. He served until his appointment to be secretary of the College, in which position he began service February 20, 1899. Governor Stanley named J. H. Satterthwaite as his successor on the Board for the term ending April 1, 1903.

Republican confidence in their early return to power was rudely disturbed by rumors that Governor Leedy was considering calling a special session of the old legislature for the purpose of enacting a new railroad law. This would give an opportunity to have Regent Munger's appointment as successor to Regent Kelley confirmed, and also for the confirmation of the appointment of Mr. Phipps. Other appointments might also be made. Pressure upon the governor, coupled with his own inclination, prevailed, and a special session was called to meet December 15, 1898, to enact "suitable legislation for the regulation of railroad charges."

During this session, efforts were made to get the governor to send to the senate appointments of Regents for confirmation. He finally nominated Carl Vrooman to fill the position made vacant by the death of Regent Kelley. On January 5 the senate voted not to confirm this appointment, but reconsidered the case the next morning and confirmed it. Thus there were again in power until April 1, 1901, four regents supposed to be in harmony with the

reorganization plans. These were Mrs. St. John and Messrs. Hoffman, Limbocker, and Vrooman. Mr. Hudson was also a member up to April 1, 1899.

CONTRACTS WITH MEMBERS OF THE FACULTY

The Board of Regents was in session from January 2 to 7, 1899. On the sixth, Mr. Munger, who had declined to remain on the Board longer, performed his last service, and Mr. Vrooman succeeded him the next day. In addition to other important business the Board empowered its president, Regent Limbocker, to enter into written contracts running to June 30, 1901, with Messrs. Will, Bemis, Parsons, Metcalf, Ward, Walters, Cottrell, Emch, Harper, Fischer, and Weida, and Misses Wescott, Howell, and Winston. These contracts provided for their employment in the same positions and at the same salaries as were then in effect. This unprecedented action was not announced, and there was no general knowledge of it until April, 1899.

The Board held another meeting in February, and at its conclusion adjourned to meet at the call of its president. Pursuant to this action, a meeting was called to begin March 29, three days before the term of Regent Hudson expired. At this meeting the majority would be independent of the vote of Mrs. St. John, upon whom they could not always depend. There was general suspicion that at that meeting important action might be taken that could not be carried April 1. The *Nationalist* of March 17 commented upon this situation in very positive terms, concluding with: "Peace has been offered—if war is wanted it will be made—war to the knife and the knife to the hilt."

CHARGES AGAINST MEMBERS OF THE BOARD

The opponents of the reorganization considered that, from the enactment of the law of 1897 to the then present, party politics had been the basis for action. The frustration of plans through the death of Regent Kelley had been successfully met by the special session at which Mr. Kelley's successor was confirmed. Opponents felt justified in meeting partisanship with partisanship, and in so doing invoked a law passed in 1889 which provided procedure for use in investigation of state institutions, and the conduct of their officers, and the removal of such officers if such action were deemed advisable. The *Topeka Capital* of March 29 foreshadowed such a course of action. Using the provisions of this law, H. A. Perkins, editor of the *Nationalist*, on March 28, filed with Governor W. E. Stanley charges of illegal acts alleged to have been committed by

Regents Hoffman and Limbocker. March 29, Governor Stanley suspended these Regents pending investigation of the charges.

The case proceeded in accordance with the provisions of law. The governor appointed an investigating committee consisting of Senators R. B. Ward and G. H. Lamb, and Representatives L. L. Wise and Thomas Flannelly, Republicans, and Representative T. C. Rogers, Populist. At the first meeting of this committee April 10, neither side was ready to proceed, and Mr. Perkins was given time to amend his charges and make them more definite. At the investigation, testimony was taken on points not included in the formal charges.

Space cannot be spared here for even a summary of the proceedings. A review prepared by Prof. Frank Parsons and printed in the *Industrialist*, June, 1899, pages 378 to 387, is a dispassionate account, and would require very few annotations or additions. The committee found some of the charges to be sustained, while others were not. The result was that Governor Stanley removed Regents Hoffman and Limbocker, and appointed J. S. McDowell and W. T. Yoe to succeed them. He had previously appointed E. T. Fairchild to succeed T. J. Hudson, whose term had expired. The struggle was prolonged somewhat by injunction and counter-injunction actions, but the final result left the Republican Regents in control.

It should be added that the charges sustained against Regents Hoffman and Limbocker were of illegalities rather than criminalities. The College was in politics. This is proved by the fact that the newspapers, and, to a large extent, the population of the state, were lined up according to party affiliation in respect to attitude on the policy that the Board had exemplified, and the removal of these Regents was an incident in a struggle.

A NEW BOARD OF REGENTS

The new Board first met May 11, and Regent Fairchild was elected its president. He was superintendent of the Ellsworth schools, and was the leading figure of the Board of Regents during his membership. Later he became state superintendent of public instruction, and then president of the New Hampshire College of Agriculture and the Mechanic Arts. The conservative and constructive policy of this Board was largely due to him.

During the investigation of the Regents, the dining hall had been closed, but on petition of the students, the manager, Mrs. Hanson, was permitted to use the College facilities and conduct the enterprise for the remainder of the term, the College having no financial responsibility.

CURRICULUM REVISION

In view of the charges of overloading the curriculum with economics, and the faculty with teachers in the field of economics and sociology, perhaps the most important action of the Board at this meeting was provision for a faculty committee on revision of the curricula. Regent Fairchild appointed Professor Nichols chairman of that committee, and Professors Cottrell, Harper, Stoner, Ward, Winston, Hitchcock, and Willard as additional members. The committee was asked to submit its recommendations to the Board at an early date. These did not go to the faculty for debate or action.

This committee was representative of all the chief phases of the work of the College, and included five of those recently appointed to the faculty and three who had been longer in service. It held many meetings and was unable to agree upon a report. Some were influenced by unwillingness to make recommendations the adoption of which would make some colleague on the faculty unnecessary. A majority report was submitted by the newer faculty members, and a minority report by Professors Nichols, Hitchcock, and Willard. The Board adopted the minority report, with perhaps slight changes. This reduced the required work in history and political science from nine terms to five, but the opportunity for choice in electives was increased. An increase in admission requirements was also made.

THE ANNUAL ADDRESS

Among the minor acts of the new Board was the cancellation of the engagement of Wm. J. Bryan to give the annual address commencement day. The preceding Board had arranged for this, but this Board canceled it on the ground that it was "opposed to giving this occasion a political significance." The Board designated President Will to select another speaker and requested "that some gentleman not recognized as a politician be invited." President Will obtained Rev. Benjamin Fay Mills of Boston. The action of the Board in canceling the engagement of Bryan was quite generally condemned as bad taste, bad tact, and bad business for Manhattan.

FACULTY CONTRACTS

The new Board at its June meeting received an oral statement from President Will that there was no official record of any contracts having been made by Regent Limbocker with certain members of the faculty as authorized by the Board on January 7, 1899. He stated that he had such a contract himself.

REMOVALS AND APPOINTMENTS

Regent McDowell offered the following resolution: "Resolved that the interest of the Kansas State Agricultural College requires (that) the services of the following named officers and professors of the College be dispensed with after June 30, 1899: President Will, Professor Bemis, Professor Ward, Professor Parsons, Secretary Phipps." Regents Fairchild, Yoe, McDowell, Satterthwaite, and Hunter voted aye, and Regents St. John and Vrooman voted no. It had been generally expected that removals would be more numerous, but members of the faculty urged that they be made as few as possible, and in this and other respects the Board proved to be rather conservative. Regent Vrooman made a strong plea in behalf of Professor Ward, but with no success. (See *Industrialist*, July, 1899, pages 465-6.)

Professor Ward had served only one year as successor to Professor Olin, and was well liked by his students. He was a Unitarian minister and was accused of going out of the proper field of his professorship to indoctrinate the youth in his charge with his own beliefs in religion. His removal illustrates the fact that those who support an educational institution will not accord to a college professor freedom to teach that which tends seriously to controvert their own views. He is on shaky ground who even discusses as impartially as possible a subject upon which there are serious differences of views. Expression of opinions traversing the religious beliefs of a large contingent is especially risky. Soon after his removal, Doctor Ward organized a Unitarian Church in Manhattan.

Prof. J. D. Walters, the prime minister of the Will administration, was retained on the faculty, but the chair of graphic mathematics, occupied by Professor Emch, was abolished. This had been established in order to relieve Professor Walters in his departmental work so as to give him time for general administrative service, especially in responsibility for the bookstore. Professor Walters gave loyal and valuable service in succeeding administrations until his retirement as professor of architecture, *emeritus*, in 1917, after forty years of active service. He died September 30, 1929.

George L. Clothier, assistant in botany, was on leave of absence and was not re-engaged, being succeeded by J. M. Westgate, who had been acting assistant during Mr. Clothier's absence.

Independently of the change in administration, Chas. S. Davis was succeeded by J. D. Rickman as superintendent of the printing department.

Miss Lorena E. Clemons, assistant secretary, was made secretary of the College, succeeding Mr. W. H. Phipps.

No other changes in heads of departments were made, and but

few in subordinate positions, and these had no political origin, as far as the writer ever heard. Limitations of space, as well as futility of comment, prevent statements concerning these other appointments and reappointments. Several of them were of persons well known as active Populists, and it cannot be successfully maintained that any appointments were made on a partisan political basis.

The most important matter that engaged the attention of the Board at this time was the selection of a president for the College. Among those whose merits were urged by their friends were E. T. Fairchild, president of the Board; F. D. Coburn, secretary of the State Board of Agriculture; C. D. Smith, director of the Michigan Agricultural Experiment Station; Francis C. Lockwood, of Upper Iowa University; Oscar E. Olin, formerly of this College; and Geo. W. Winans, previously state superintendent of public instruction. The Board postponed a decision and, June 12, named Ernest R. Nichols, professor of physics, to be acting president until a president should be elected. June 13, 1900, he was elected president.

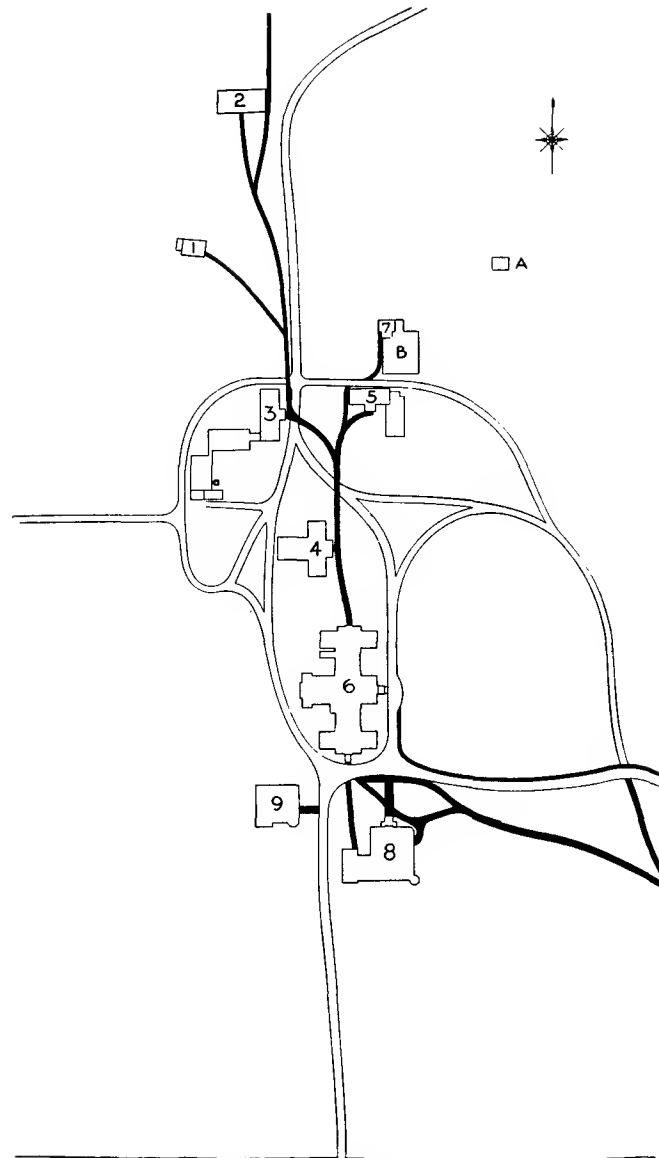
Rumors were rife that President Will and Secretary Phipps would not turn their offices over to their elected successors, and in fact some little trouble was made in connection with keys, but they did not persist in this for any great length of time.

Professor Ward, who had signed one of the contracts supposed to secure him in his position until June 30, 1901, brought suit for his salary. The case was carried up to the Court of Appeals and decided in favor of the Board of Regents.

MAP OF THE CAMPUS 1899 (Opposite Page)

Map showing location of buildings, roads, and walks on the campus in 1899. The buildings are numbered in the order of their erection.

(1) Residence of the professor of agriculture, built in 1866 by Mrs. N. O. Preston. (2) Armory, erected in 1873 as one wing of a barn. (3) Mechanics Hall, erected in 1875. (4) Chemical laboratory, erected in 1876. (5) Horticulture Hall, erected in 1876. (6) Main College building, erected 1879-1885. (7) Horticulture and entomology offices and laboratory, erected 1888. (8) Library and Agricultural Science Hall, erected 1894. (9) Domestic Science Hall, erected 1898. (A) Horticultural barn, erected 1889. Has been razed. (B) Propagating houses, erected in 1888. Have been razed.



MAP OF THE CAMPUS 1899



ERNEST R. NICHOLS

Physics, 1890-1900; electrical engineering, 1899-00. President, 1899-1909.

CHAPTER VII

THE ADMINISTRATION OF ERNEST REUBEN NICHOLS

JULY 1, 1899, TO JUNE 30, 1909

ACTING President Nichols took up his duties with efficiency and toleration. He adopted from the first a policy of conducting no controversy through the medium of the press. He was not a fluent speaker nor a voluminous writer under any circumstances, and at that time this may have been fortunate. Be that as it may, the *Industrialist* was kept free from any criticism or disparagement of the administration of President Will, and from glorification of his own. It was restored to its previous functions, and again made a weekly instead of a monthly, but the magazine form was retained.

The most serious situation to be met by President Nichols and the Board was that created by certain unpaid salaries and other obligations. Doubt existed in respect to the legality of the procedure previously followed, in which deficits of one fiscal year were paid from funds available after the beginning of the next. Advice was sought from the attorney general of the State, who held that debts incurred within one fiscal year could not be paid from appropriations made for expenses of the next. The Board could act only in accordance with this ruling, and hence payment of obligations totaling \$14,893.45 was held up until 1901, when the legislature passed a deficiency appropriation to pay them.

President Nichols thus began his administration in the almost unique situation of having no burden of debt to assume which would have seriously reduced the funds available for current needs. Emotional offsets to this advantage were the imprecations of unpaid members of the faculty and of other creditors. President Nichols was a systematic business man himself, assuming no obligations not covered by resources, and paying his bills as they became due. He adopted a similar policy for college departments. No department head could incur executive displeasure more promptly and superlatively than by assuming to make unauthorized expenditures. This policy carried the College through his entire administration without a deficit at any time, and in general this policy has been continued by all his successors.

DEVELOPMENT OF THE FACULTY

The faculty at first was substantially the same as that of the preceding year except that Dr. Francis C. Lockwood succeeded Dr. Duren J. H. Ward as professor of English, and Dr. Carl Evans Boyd became professor of history and economics, taking over the work of Doctor Bemis and Professor Parsons. Professor Parsons had taught only two terms each year. Theodore Lindquist was employed as assistant in physics in recognition of the fact that much of the time of Professor Nichols would be absorbed by the acting presidency. Charles S. Davis, superintendent of printing, had not



AUDITORIUM

The auditorium erected in 1904 is also used to house in part the department of music.

been included among those accorded the privilege of entering into written contracts in January, 1899. This judgment of the Will administration was accepted by the new Board, and he was not retained. His place was filled by the promotion of Assistant J. D. Rickman, who served into the next administration. The vacant librarianship was filled by the election of Miss Josephine T. Berry.

Changes in the faculty during the Nichols administration are noted in this volume only when they are of special significance, such as in the heads of departments. Most of those who left the faculty did so voluntarily for the purpose of entering better positions. The enrollment of students increased from 870 in 1898-99

to 2,308 in 1908-09. This called for a great increase in subordinate members of the teaching force, and for an increase in the number of departments from 19 to 28 by division, or by reason of the introduction of new courses. At the same time the personnel increased from 46 to 116, not counting student assistants.

Dr. Carl E. Boyd, after a year of excellent service, resigned his position as professor of economics and history, and was succeeded by Charles E. Goodell, September, 1900, who carried the department with ability for three years. Upon his resignation to take a similar position in Denison College, Granville, Ohio, Ralph Ray Price was chosen to be his successor. After he had served one year in this capacity, the department was divided, and economics transferred to Prof. J. E. Kammeyer. Professor Price was then designated as professor of history and civics. Without essential change in scope, the name of the department was made history and government in 1927, and Professor Price's title changed accordingly. He still (1939) remains at the head of this department which he has conducted with efficiency, breadth of view, tact, and general satisfaction to all.

In the department of military science and tactics Cadet Major **R. B. Mitchell** was acting commandant when Acting President Nichols took office, but was soon given a lieutenant's commission in Company E, Fortieth United States Volunteers, and sent to the Philippine Islands. Cadet Major Charles D. Montgomery succeeded him early in October, 1899, and served the remainder of the college year. The next two years, 1900 to 1902, Cadet Major Charles Eastman was acting commandant. The years of student command came to an end, September, 1902, with the detail of Capt. Andrew S. Rowan of the Nineteenth Infantry, one of the heroes of the Spanish-American War. Elbert Hubbard increased the fame of Captain Rowan by "A Message to Garcia," an essay which while not historically accurate is packed with good sense, and attained world-wide circulation. Captain Rowan had been an officer of the regular army too long to fit in very well with a college position, and remained only one year. Capt. Pearl M. Shaffer, of the Twentieth Infantry, became commandant, September, 1903, and served four years. He was succeeded by Capt. Charles H. Boice, of the Seventh Cavalry, who also served four years, retiring in 1911.

June 30, 1900, Dr. Mary F. Winston, to the regret of everyone, resigned the headship of the department of mathematics. She married Dr. H. B. Newson, of the University of Kansas. Benjamin L. Remick was elected professor of mathematics to succeed Dr. Winston, and remained head of the department until June 30, 1937, and is still (1939) a valued member of the department.

When Acting President Nichols became president, he relinquished the professorship of physics and electrical engineering, and Benjamin F. Eyer, a popular and efficient science teacher in the Topeka high school, was made his successor in that chair. Mr. Lindquist was retained as assistant but remained only one year more, when he was succeeded by John O. Hamilton, who with successive promotions remained on the faculty until his death, August 9, 1938.

Professor Eyer was granted leave of absence for the purpose of further study during the year 1901-02, and Leon W. Hartman filled his place here. Professor Eyer remained with the College to December 31, 1912, when he resigned and became a consulting engineer. July 1, 1908, the department of physics and electrical engineering was divided, Professor Eyer becoming head of the department of electrical engineering, and Professor Hamilton of the department of physics.

Dr. Paul Fischer remained as professor of veterinary medicine until August 31, 1900. His successor, Dr. Tait Butler, being drawn away by a better position, served only from December 13, 1900, to August 15, 1901, and Dr. N. S. Mayo was recalled. This second term for Doctor Mayo extended from September 1, 1901, to August 31, 1904, when he resigned to take the position of chief of the bureau of animal industry in the republic of Cuba. Dr. F. S. Schoenleber was then employed for this position, but could not come until April 1, 1905. He remained until March 1, 1917.

Prof. J. D. Harper resigned his position as head of the department of mechanical engineering, January 31, 1901, and was succeeded September 1, 1901, by Edmund B. McCormick, who remained in that position until August 15, 1913. September 18, 1913, he was succeeded by Andrey A. Potter, who remained until August 31, 1920.

Prof. A. S. Hitchcock resigned his position at the head of the department of botany, March 1, 1901, to become assistant agrostologist and later agrostologist in the United States Department of Agriculture, where he won world-wide recognition. At the College he was succeeded, March 27, 1901, by Herbert F. Roberts, a scholarly man who carried on the work with enthusiasm, though somewhat handicapped by lack of farm experience. He interested himself especially in wheat breeding. One of his selections became of great importance later as Kanred wheat. The small stock of this variety produced by him was increased by the agronomy department and widely distributed. On account of impaired health, Professor Roberts retired in 1919. Later he held a responsible position in the University of Manitoba at Winnipeg.

Prof. F. A. Metcalf closed his connection with the College June

30, 1901, and was succeeded by Wilford O. Clure September 1, 1901, who served for two years. September 1, 1903, Prof. Julius E. Kammeyer became professor of public speaking, and the name of the department was changed from oratory to public speaking. The next year the teaching of economics was added to Professor Kammeyer's duties, and these continued unchanged until 1909, when the work in public speaking was taken over by an assistant, Everett P. Johnston, though directed by Professor Kammeyer until September, 1911. Professor Kammeyer remained head of the department of economics until his death, January 11, 1936. His courteous manners, excellence as a speaker, and eminent success as a teacher will long be remembered.



CALVIN HALL

The building shown above, erected in 1908 as Domestic Science and Art Hall, was in 1925 named Calvin Hall in honor of Henrietta Willard Calvin, professor of domestic science 1903-1908 and prominent since in home economics education.

Librarian Josephine T. Berry was replaced July 1, 1901, by Mrs. Henrietta W. Calvin. Upon the promotion of Mrs. Calvin to be professor of domestic science from September 1, 1903, Miss Margaret J. Minis, assistant librarian, was made librarian, and continued in the position until she resigned to be married, and was succeeded by one of her assistants, Miss Anne M. Boyd, July 1, 1907. Miss Boyd was given leave of absence July 1 to September 1, 1908, and did not return. She was followed as librarian by another of the assistants, Miss Gertrude A. Barnes, December 1, 1908, who continued in the office until the appointment of A. B. Smith, September 1, 1911, who still (1939) holds the position.

After the resignation of Miss Stoner, June 30, 1901, Miss Edith McIntyre was elected professor of domestic science, effective September 1, 1901. Two years later she was succeeded by Mrs. Henrietta W. Calvin, who was promoted from the librarianship. During her service as librarian, she had displayed superior executive ability, and at farmers' institutes had been highly successful as a speaker on subjects pertaining to the home. She was a valuable member of the faculty not only in her department but in the general administrative features of the College. Her work by direction of the president in these more general capacities involved friction with certain other members of the faculty, and March 24, 1908, her resignation was "accepted to take effect September 1, 1908." She went at once to a similar position in Purdue University and later to positions of increasing importance.

Following the resignation of Mrs. Calvin, Mrs. Dalinda Mason Cotey was elected professor of domestic science. She accepted, but almost immediately was obliged to resign on account of ill health, and Mary Pierce Van Zile was elected July 29, 1908. The next day the Council of Deans was established, and she was made dean of women, also. She is still (1939) serving in this latter capacity with unusual ability and success.

J. T. Willard, professor of applied chemistry, was made professor of chemistry and head of the department July 1, 1901. At the same time Dr. Geo. F. Weida, professor of pure chemistry, was made assistant professor of chemistry. Dr. Weida resigned August 31, 1903. He was an interesting lecturer, fluent writer, and companionable associate, and well liked by students and faculty.

Dr. F. C. Lockwood, professor of English, was given leave of absence for study during the year, 1901-02, but, greatly to the regret of the Board, resigned instead of resuming his position. Miss Mary E. Berry had been employed to serve the one year. For the permanent appointment to succeed Professor Lockwood, Dr. Clark Mills Brink was elected. He was a man who had attained broad culture through prolonged study, and served the College the remainder of his life, fourteen years. In 1908 he was made dean of science and assistant to the president. In 1909 his title as dean was changed to be dean of the College. His death occurred June 29, 1916.

July 10, 1901, the farm department was divided into the department of agriculture and the department of dairy husbandry, with H. M. Cottrell and D. H. Otis as heads, respectively. E. H. Webster became assistant professor of dairy husbandry October 21, 1901.

Prof. Daniel H. Otis began his official connection with the Col-

lege as a second assistant in agriculture, December, 1892, his duties at first being chiefly in the office. Succeeding years brought changes of responsibility leading toward special attention to dairying, and September 28, 1900, he had become assistant professor of dairying. His title, professor of dairy husbandry, was effective July 9, 1901, and continued to September 26, 1902.

Prof. H. M. Cottrell resigned his position as professor of agriculture and superintendent of the farm June 30, 1902, to accept the superintendency of the Vrooman farm at Trenton, Missouri, at a considerable increase in salary. This closed a connection in which, with an interruption of nearly six years, he had served the



CHEMICAL ENGINEERING HALL

This building was used by the dairy department from its erection in 1904 to 1923 when it was assigned to the department of chemistry and is used for work in industrial chemistry and chemical engineering. Dickens Hall is shown in the background.

College with ability and aggressiveness from the establishment of the Experiment Station in 1888. He conducted valuable research in several phases of animal husbandry, and was especially successful in the work of farmers' institutes.

The resignation of Professor Cottrell led to a three-way division of the agricultural work, and departments of agriculture, animal husbandry, and dairy husbandry were established September 26, 1902. Professor Otis was made professor of animal husbandry, and served until August 31, 1903, resigning at that time to accept the superintendency of the Deming Ranch, Labette County, Kansas. Albert M. TenEyck was elected professor of agriculture, and entered upon his duties December 1, 1902. Assistant Professor Webster was made professor of dairy husbandry. He resigned March 31, 1903, to accept a position as expert in the dairy division, United

States Department of Agriculture. His duties here were taken on by Professor Otis until his resignation, when Prof. Oscar Erf succeeded him as professor of dairy and animal husbandry September 1, 1903.

Another reorganization of work took place July 27, 1905, and Professor Erf became professor of dairy husbandry, and Assistant Professor Roland J. Kinzer, professor of animal husbandry. Professor Erf retained this position to August 31, 1907, when he accepted a similar one in Ohio State University. Professor J. C. Kendall succeeded him here, January 1, 1908, and served into the next administration, as did also Professor Kinzer.

June 10, 1899, the sewing department was renamed and became the domestic art department, Miss Howell continuing as superintendent. The September before, the superintendent had been given independence of the professor of household economics, but without change of her title or of the name of the department. Miss Howell resigned June 30, 1902, to accept a similar position in the Throop Polytechnic Institute, Pasadena, California. The *Industrialist* commenting said she "leaves a host of friends, as well as an enviable record as a bright young lady and a hard and effective worker."

Succeeding Miss Howell as head of the department of domestic art were Miss Marian Jones, 1902 to 1904; Miss Frances M. Barnes, 1904-05; and Miss Antonetta Becker, January 1, 1906, to June 30, 1912. Miss Becker was given the rank of professor in 1909.

Prof. E. A. Popenoe between 1897 and 1899, when he was not with this College, had bought a fine farm south of Topeka, and when he was re-employed from September 1, 1899, did not move his home back to Manhattan. The attention to the farm and weekly trips home encroached so much upon his effectiveness in service of the College that he resigned his position as professor of entomology and zoology, August 31, 1907. Dr. Thomas J. Headlee was appointed to succeed him, September 1, 1907, and remained with the College until September 30, 1912.

In the department of music Prof. Olaf Valley succeeded Prof. A. B. Brown, September 1, 1904, and continued at the head of the department until June 30, 1915.

A number of young men who were first employed at the College within the Nichols administration were later advanced to eminent positions here or elsewhere. Among these was Dr. Septimus Sisson, who was appointed to be associate professor of veterinary science from July 1, 1899, and made professor of zoology, about December 13, 1900. June 30, 1901, Dr. Sisson resigned his position here to accept a distinct promotion at Ohio State University,

where for many years he enjoyed world-wide recognition as a comparative anatomist.

Albert Dickens was appointed to be assistant in horticulture from July 12, 1899. He became acting head of the department of horticulture, July 1, 1901, and was given full standing as professor of horticulture July 1, 1902. He filled this position with distinction to the time of his death, November 28, 1930. His wide acquaintance in the state, practical attainments, sound common sense, unswerving loyalty, and contagious good temper made him for many



DICKENS HALL

This building, used by the departments of horticulture, and botany and plant pathology, was erected in 1907. In 1931 it was named Dickens Hall in honor of Prof. Albert Dickens who had been head of the department of horticulture for thirty-one years.

years one of the most valuable members of the faculty. Assigning his name to Horticulture Hall in 1931 was a well-earned recognition of his worth.

Edwin H. Webster, already mentioned, was recalled to be director of the Agricultural Experiment Station, and began service December 22, 1908. By the provision then in force he also became *ex officio* dean of agriculture. He continued in these capacities to January 31, 1913, when he resigned to re-enter commercial work, and was on leave of absence from December 30, 1912. In all his connections he displayed unflagging industry and high ability.

George A. Dean began official connection with the College, April 1, 1902, as assistant in entomology. He attained the rank of instructor in 1906, assistant professor in 1907, and became head of the department of entomology, October 1, 1912, and professor

of entomology. His work in economic entomology is recognized as outstanding not only in the State of Kansas, but in the country at large and in Europe.

Roland J. Kinzer served as assistant in animal husbandry one year from September 1, 1903, when he became assistant professor. July 27, 1905, when the department of dairy and animal husbandry was divided, he became professor of animal husbandry and head



DENISON HALL

This building was erected for physics, chemistry, and electrical engineering in 1902. It was destroyed by fire in 1934. Its position on the campus was such that a good view of it was difficult to obtain.

of the department. He continued to administer this department with great practical ability until his resignation December 31, 1910, to become secretary of the Hereford Breeders Association, in which capacity he has created distinguished success.

Geo. F. Freeman became assistant in botany September 1, 1904. His valuable service in teaching and research was recognized by promotions, but he resigned in 1909 to accept the professorship of botany in the University of Arizona. There, and later in other positions, he had a distinguished career.

Immediately after his graduation in 1904, Roy A. Seaton was made an assistant in mathematics. He was given the rank of assistant professor, June 15, 1906. In September, 1906, he was transferred to the department of mechanical engineering with the rank of assistant. He was promoted to the rank of instructor December

1, 1908, and to that of assistant professor from July 1, 1909. When the department of mechanical engineering was divided under the next administration, he was made professor of applied mechanics and hydraulics, September 1, 1910, but was on leave of absence for study and experience for two years. His title and sphere of respon-



DENISON HALL

This building was erected for physics, chemistry, and electrical engineering in 1902. It was destroyed by fire in 1934. Its position on the campus was such that a good view of it was difficult to obtain. This view shows a large part of the front of the building, which faced south and stood a short distance northeast of Anderson Hall.

sibility changed somewhat from time to time, and since 1920 he has been dean of the Division of Engineering and director of the Engineering Experiment Station. His high competence in the performance of the duties of these positions receives nation-wide recognition, and he is a striking example of what a young man of high ability may attain by hard work.

Andrey A. Potter came to the College, January 1, 1905, to be assistant professor of mechanical engineering. September 1, 1910, he became professor of steam and gas engineering, and had charge

of mechanical engineering. September 1, 1913, because of the resignation of Dean McCormick, he was made acting dean, and later dean of the Division of Mechanic Arts. In this position he manifested great efficiency, but was attracted to a similar but more highly developed organization in Purdue University, and resigned his position here August 31, 1920.

Herbert H. King, head of the chemistry department since July 1, 1918, began his career here as an assistant in chemistry, September 1, 1906. He was promoted to be instructor in 1908, assistant professor in 1909, associate professor in 1914, and professor in 1918. Within this period he had obtained the degree doctor of philosophy at the University of Chicago, and demonstrated all-round efficiency in the several phases of activity involved in his position. His unfailing good temper and cordial interest in student affairs make him one of the most popular professors in the institution.

Charles O. Swanson came to the College as assistant chemist of the Agricultural Experiment Station, September 1, 1906. Three years later he was added to the teaching staff as assistant professor of agricultural chemistry, and in 1914 he was given the rank of associate professor, and of associate chemist of the Experiment Station. At the beginning of his service he took up with much interest work already begun in the department on the milling quality of wheats, and baking tests of flour. His interest in this work and the value of his researches led to his transfer to the headship of the department of milling industry, July 1, 1923. Since then he has given that department an international reputation. He was on sabbatical leave of absence, 1921-22, and received the doctor's degree from Cornell University.



THE OLD PUMP

A view of the College pump as it stood for many years south of Denison Hall. The breaking of its handle interrupted its use by students. The water furnished by the well which it served was excellent and was used for drinking in preference to the Manhattan city water first furnished to the College in 1889 which was strongly impregnated by iron.

Another bright young man who came to the College in this administration was Leland E. Call, whose initial connection was as assistant in agronomy, January 1, 1907. In 1908 he was made assistant professor of soils, and from 1911 to 1913 associate professor of soils. He then became professor of agronomy, and retained that title until he was made acting dean of the Division of Agriculture and acting director of the Agricultural Experiment Station, March 1, 1925. Since May 5, 1925, he has been dean of that Division and director of the Agricultural Experiment Station. His whole connection with the College has exemplified ability, tact, and progressive development, and national recognition has been accorded him repeatedly.

Leland D. Bushnell, the genial head of the department of bacteriology, also commenced his service here in the Nichols administration though not until September 1, 1908. He became instructor in 1910, assistant professor in 1911, and professor in 1912. He was in charge of the department 1911-12 and has been head since 1912. He was the first member of the faculty to take the opportunity for sabbatical leave of absence for study, provided by the Board of Regents. He went in 1915-16 to Harvard University and obtained the degree doctor of philosophy. His departmental success is unquestionable.

NEW OR REORGANIZED DEPARTMENTS

The growth of the College in size, and its development to a certain extent in scope, led to changes in departmental organization. The old all-inclusive farm department through several opportunist actions became three departments, viz., agronomy, animal husbandry, and dairy husbandry. Work with poultry was assigned to the department of dairy husbandry, and college courses in that branch were offered in 1908. More or less desultory handling of poultry had been done for many years.

BACTERIOLOGY

Class instruction in bacteriology was given to a special group the fall of 1897. In 1898 it was included in the curriculum in agriculture, and in 1899 was also made part of the general curriculum, and the curriculum in household economics. It was handled at first in the department of veterinary science. The number receiving instruction in this subject increased to such an extent that the department of bacteriology was established with Prof. Walter E. King as its head, June, 1907. Professor King remained with the College until 1910, when he resigned to accept a responsible position with Parke, Davis and Co.

ECONOMICS AND HISTORY

While the study of history and economics was administered in a single department from September, 1899, it was separated in 1904. In January, 1904, the name of the department of oratory was changed to public speaking, and instruction in this field was at-



VETERINARY HALL

This building erected in 1908, provides quarters for the departments of the Division of Veterinary Medicine, and the department of bacteriology.

tached to the chair of economics the next September. The scope of the department of history was recognized by a change of name to history and civics.

EDUCATION

The department of education had its beginning in September, 1900, when Prof. W. A. McKeever began his connection with the College. He was designated as assistant professor of English and philosophy. His title was made professor of philosophy the next year. Under this title he gave the regular instruction in logic and psychology, and also offered courses in history of education, philosophy of education, and methods and management. On the basis of graduation from the College with proficiency in certain required subjects, a student who, in addition, elected these so-called professional subjects in education became eligible to receive from the State Board of Education a State teacher's certificate. Previous to this time, graduates of this College had been obliged to take State examinations in the professional subjects. Instruction in education

was limited to these subjects through the Nichols administration. Under the succeeding Waters administration it was greatly enlarged.

GERMAN

Instruction in German was provided much of the time during the early years of the College, but this was abandoned by President Anderson. Petitions of students to the Board of Regents for instruction in this language because of its need in advanced study of the sciences were not granted. To meet the needs of such students of science, instruction began to be given with special attention to attaining a reading knowledge of the language. This was done by volunteer teachers as far back as 1894. In 1904 a regular department was organized with Dr. John VanZandt Cortelyou as its head. This developed later into the department of modern languages.

PHYSICAL EDUCATION AND ATHLETICS

During the first years of the operation of the College, direct attention was given to physical education under the name of calisthenics. Later this was abandoned. Interest in such work was manifested by the students, and an organization of the young men was maintained. In 1892 Miss Minnie Reed, '86, while taking graduate work, was employed to give calisthenic exercises to such young women as desired it. This instruction was provided in subsequent years, the details of which will not be given at this time. In July, 1899, physical training was made a requirement for all young women of the first and second years. Miss Florence Ball was made director of this work and began service October 10, 1899. She continued in this capacity until her death December 9, 1900. She was succeeded by Miss Gertrude Williams, February 1, 1901, who resigned September 17, 1901. Beginning November 5, 1901, Mrs. Edith N. Clure became director of physical training, and was succeeded September 1, 1903, by Miss Estella M. Fearon. Miss Marguerite E. Barbour succeeded to the directorship September 1, 1904, and remained until August 31, 1910.

Physical education and athletics made notable gains during the ten years of this administration. In the revisions of curricula adopted by the Board July 13, 1899, physical training was made a requirement for all young women of the first and second years. In 1904 an option was allowed them between physical training and music, but in 1905 this opportunity was withdrawn as to freshmen, but continued for sophomores, and this remained in force into the next administration.

Required physical education for men was limited to military training, but voluntary participation in athletics grew in numbers and scope of activities. Gymnasium apparatus was purchased by the Board, and the Athletic Association, under faculty supervision, enlarged the field of intercollegiate competition. The employment



NICHOLS GYMNASIUM

This building was named in honor of Ernest R. Nichols, head of the physics department 1890 to 1900 and president of the College from 1899 to 1909. In addition to the work in physical education, this building provides quarters for the military department and for some of the instruction in music.

of coaches for football became a regular practice. For several years these men had no other connection with the College, and left at the end of the season. The season of 1903, Mr. R. F. Booth, employed as an assistant in physics, was given charge of the coaching of football the latter part of the season. This was the first example in the country of the use of a regular member of the faculty for this purpose. Mr. Booth served in this capacity the next year also. He was assisted for a short time by Mr. M. F. Ahearn, foreman of the greenhouses. Mr. C. W. Melick, assistant in dairying, coached baseball and track.

June 16, 1905, Messrs. Ahearn and Melick, on the request of the Athletic Association, were designated as athletic coaches by the Board of Regents. Mr. Melick continued to coach baseball and track the ensuing college year, and Mr. Ahearn coached football. Mr. Melick resigned his connection with the College at the end of

the year, and from 1906 to the spring of 1911 Mr. Ahearn coached all the sports, with assistance at times from others.

At that time Mr. Ahearn was under disguise in the catalogue as M. Francis Ahearn, but no one with his ready speech, sparkling wit, imperturbable good temper, sound judgment, and perfect sportsmanship could be long suppressed by so feeble an obstacle, and "Mike" he promptly became and still remains to the joy of thousands. He was out of formal coaching for some years, but could not separate himself from contact with sports, and, on the sudden resignation of Prof. Z. G. Clevenger, he was drafted by President Jardine, and the professor of landscape gardening became professor and head of the department of physical education and director of athletics, September 16, 1920. His success in this position is beyond commendation.

PREPARATORY WORK

The administration of the preparatory work offered at the College under the direction of a single head initiated by President Will was continued. The period for which Mr. S. N. Chaffee had been employed having expired, Mr. Benjamin S. McFarland, on motion of Regent St. John, was elected principal of the preparatory department, July 13, 1899. He had been strongly indorsed for the presidency of the College in 1879, and by Regent St. John for the professorship of mathematics in 1897. He served as principal until his death September 3, 1907. Robert J. Barnett was then elected principal and served until the abolition of the department as a separate organization. The work was then offered as a "subfreshman course," and the teachers were distributed among the subject-matter departments represented, June 15, 1909. Among these teachers was Miss Ina E. Holroyd, who is still (1939) an effective assistant professor in the department of mathematics.

Principal Barnett was made an assistant professor of mathematics, and retained the position until 1911, when he resigned to become professor of pomology in Washington State College. He was brought back to Kansas State College, October 11, 1920, to be a professor in the department of horticulture, and became head of the department July 1, 1930.

ADMISSION

With the revision of the curricula in 1899, there was also some increase in the subjects required for admission. These included English composition, elementary physiology, bookkeeping, and algebra through simple equations of one unknown quantity. This increase was not regarded as an abandonment of the general princi-

ple of keeping within the preparatory possibilities afforded by the schools available to the rural classes. The students presented a petition in opposition to this action. As a preparatory department was maintained by the College, any increase in the requirements for admission to the curricula constituted an elevation of the standards for graduation. Under similar considerations, algebra to quadratic equations, English Readings I, and free-hand drawing were transferred from the freshman year to the preparatory requirements when the curricula were revised in 1903.

In 1904 further change took place, and the catalogue statement reads: "Full admission to the first year, in addition to the common-school branches—reading, spelling, writing, geography, arithmetic, United States history, English grammar, and physiology—requires bookkeeping, advanced English grammar, English readings, English composition, algebra through progressions, physical geography, elementary botany, ancient and medieval history."

The only additional changes in admission conditions made during this administration were a substitution of modern history for physical geography, and an extension of botany from one term to two in 1908. In 1909 the subjects beyond the common branches were formulated in a "subfreshman course." Effective September, 1910, the succeeding administration, that of President Waters, introduced the plan of expressing the terms of admission in high-school units.

CURRICULA

At the beginning of the administration of President Nichols, the differentiation in curricula initiated under President Will had resulted in the offering of four four-year curricula; namely, agricultural, engineering, general, and household economics. These four curricula were revised considerably in 1899 and the names changed to agriculture, mechanical engineering, science, and domestic science, respectively. The chief features of the revision were that the first year was made the same for all students excepting for such differences as sex required, and courses in history and political science were slightly reduced in number. The first year was made of a generalized character designed to give some knowledge concerning sciences, agriculture, shop work, and home economics. Physical training for two years was made a requirement for young women.

From time to time the curricula were revised, and additional ones were formulated as follows: electrical engineering, 1899; architecture, 1904; veterinary, 1905; civil engineering, 1908; and printing, 1908. In 1908 the agriculture curriculum beyond the

sophomore year was split into five; namely, agronomy, animal husbandry, dairy husbandry, poultry husbandry, and horticulture and forestry. Although these five were announced and printed in the catalogue as separate courses, they had much in common, each one differing from the others by certain characteristic studies as indicated in the name. There thus existed at the close of the Nichols administration thirteen four-year curricula.

SHORT COURSES

In addition to the College curricula, the dairy school previously operated was continued, and short courses were established in agriculture and in home economics. Each of these two consisted of two terms' work designed to be taken in the winter term of successive years. Later the short course in domestic science was given in the fall and winter terms of the same year.

SUMMER SCHOOL

The beginning of the summer sessions of the College was marked by the offering of a summer school "to meet the needs of the public school teachers of Kansas." It opened May 31, and continued to July 29, 1904. Instruction was given in domestic science, domestic art, and floriculture. The purpose was to qualify young women to meet the requirements in home economics for one-year teachers' certificates. The admission requirement was "a good general education." This summer course was continued into the next administration, when it became part of a more inclusive summer program.

GRADUATE WORK

From time to time provisions were adopted concerning the requirements for the master's degree, and, finally, making more definite the evaluation of graduate work. In 1900, specifications were reduced to their lowest terms by the statement that "each candidate shall be required to take a definite course approved by the Faculty, and his studies are expected to bear upon the distinctive work of the institution." This too complete generalization of statement while useful in clearing the ground left too much in uncertainty, and in 1902, after a complete detailed study of the subject, a well-defined procedure was adopted for administration of provisions concerning credits required, major and minors, formal assignments, final written and oral examinations, and several other essential points. In 1904 study of a modern language was allowed for credit toward the degree.

THE CONTROVERSY CONCERNING ENGINEERING

Under President Anderson work in mechanic arts was limited practically to instruction in trade skills. In the last half of the Fairchild administration under the energetic initiative of Professor Hood considerable progress was made in more advanced work of a definitely engineering nature, culminating in the formulation of a college curriculum in mechanical engineering in the first year of the administration of President Will. Professor Harper maintained the engineering spirit in mechanical lines, and his successor, Prof. E. B. McCormick, displayed much vision in conducting the department of mechanical engineering and developed it in several lines which later became distinct departments. The curriculum in electrical engineering established in 1899 was promoted by Prof. B. F. Eyer with pronounced effectiveness.

GOVERNOR HOCH'S INQUIRY

The great increase in enrollment at the College, the large fraction which chose engineering curricula, and the amounts appropriated for buildings devoted to instruction in engineering began to attract a good deal of attention.

Governor E. W. Hoch gave considerable thought to this matter, and on April 28, 1908, he called a meeting of the heads and the Regents of the three state educational institutions to consider the interrelations of these and the question of a wise educational policy in regard to them. All the officials invited assembled, and State Superintendent E. T. Fairchild was also present. After hearing a paper prepared by the governor and discussing it, the group suggested the appointment of a committee consisting of two Regents from each institution, one of which in each case should be a lawyer. Accordingly, the governor appointed for the University, J. W. Gleed and T. M. Potter; for the Agricultural College, A. M. Story and Edwin Taylor; for the Normal School, L. B. Kellogg and M. F. Amrine; and requested them to prepare papers upon the following subjects:

First. Does the law governing our state institutions need revisions in order to more clearly define their respective fields of operation, or in any way to promote their efficiency? If so, fully outline the law as you think it should be.

Second. Is it desirable to change the management of these institutions so that they will all be governed by one board of such size as may be agreed upon in order that they may be knit together in one comprehensive and symmetrical educational system instead of operating in individual fields

with unlimited power to duplicate each other's work, as now?

Third. If it is not feasible to put all these institutions under one management or put over them one superintendent, in what manner can they best be governed so as to prevent an unnecessary duplication of work, and hence any unnecessary expenditure of public money?

This committee met again on the second of July, and papers were presented by all but Regent Amrine. The committee was said to be in substantial agreement in respect to the desirability of a revision of the laws governing these institutions that their limitations might be more clearly established by statute. The committee agreed that as the law then stood there was "absolutely no limit to the power of each to duplicate the work of the other. It was also agreed that the tendency toward duplication was very marked, and that this tendency should be checked by law, and that to accomplish this result in addition to other statutory enactments the three institutions should either be put under one management or else as suggested by eminent educators *** a separate board with limited powers, chiefly to control the curricula of all these institutions, should be created. As one step toward the prevention of duplication, it was agreed, Regent Story alone opposing, that the engineering course of the State Agricultural College should be confined to practical mechanical engineering, while professional engineering should be left to the State University."

The foregoing quotation is from a letter written by Governor Hoch to the incoming governor, W. R. Stubbs. Governor Hoch discussed the situation further at considerable length.

REGENT STORY'S BRIEF

The paper presented by Judge A. M. Story, of Manhattan, president of the Board of Regents of the Agricultural College, is a strong presentation of the advantage to the Agricultural College of having engineering work taught there, as well as of its legal right under the Morrill Act to give such instruction. This paper was published in the *Industrialist*, October 10, 1908, pages 19 to 28, and copious extracts from it were also reprinted by Professor Walters in his "History of the Kansas State Agricultural College," pages 193 to 197. President Nichols assembled the data for Judge Story.

CHANCELLOR STRONG'S VIEWS

As the time for the meeting of the legislature approached, discussion began to appear in the newspapers, prompted to a considerable extent by a paper prepared by Dr. Frank Strong, chancel-

lor of the University of Kansas. In his report "for the biennium ending June 30, 1909, with estimates for the biennium 1909-11," dated December, 1908, he made a review of the educational situation in the state, combined with much general discussion of education, the whole extending to 103 pages. Chancellor Strong made a severe attack upon the College, giving special attention to its most vulnerable point, the low entrance requirements. The situation of chief interest to the chancellor, however, was the existence of our curricula in engineering.

It does not seem profitable at this late date to go into the details of the charges made by Chancellor Strong against the College, and space is not available for the purpose even if such a discussion were desirable from other points of view. In brief he considered that this College should restrict itself to training in the mechanic arts in the limited sense of occupations in which operators are given skill in following the designs prepared by others, while to the University should be left the training of those who originate designs through the higher imagination and creative powers, this constituting the work of an engineer. He stated, however, that a true engineering school includes both types of work. He suggested that this College develop "a first-class course in mechanic arts based upon requirements for entrance of one or at most two years of high school work, *** so arranged as to fit the beginning of the junior year of the various courses of the school of engineering at the University of Kansas. *** "

To meet the situation as he conceived it to be, the distinguished head of the University proposed the following:

One of five things should be done: (1) Both the University and the Agricultural College might be removed and placed upon the same campus, a new plant erected, and their buildings either razed to the ground or given over to the state for use in connection with its charitable or penal institutions; (2) the Agricultural College might be removed to Lawrence and its present plant given over to the state for such use as the state might see fit to make of it; (3) the Agricultural College might be united with the University in administration, putting both under one administrative head and one Board of Regents; (4) the Agricultural College might be left independent and yet be restricted in its field of work by legislative action—for there is no constitutional limitation on the legislature in regard to the Agricultural College as there is in regard to the University; (5)

the Agricultural College might be left free to develop itself independently into a full-rounded university in accordance with the vital principle of its own life.

Chancellor Strong continued with a discussion of the five possibilities. This was marked by an accurate appraisal of the situation, acute recognition of the probable consequences, respectively, that would follow in the event of the adoption of any one of these courses, and clarity and frankness of expression. His own choice of solution was the third option, according to which the two institutions would have been united into one organization with a single administrative head, and one Board of Regents.

There exist at certain points in the chancellor's thesis phrases suggesting a consciousness that perhaps then was the psychological moment to strike for a unity that he thought would insure the development of a state university comparable with those being formed in other states where the agricultural college is a part of the university. He may have had in the back of his mind a feeling that, with the fight that certain individuals were making on President Nichols, and his approaching separation from the College, the time might be ripe for such a change as he envisioned. He concluded with the following statement: "The attitude of the University is that the responsibility lies, not with the Agricultural College or the University, but with those who made them separate; that the relation between the two has been, under the circumstances, remarkably friendly; that the responsibility now lies with the State of Kansas, through its legislature, and that it should assume the responsibility and formulate its policy."

REGENT TAYLOR'S ACTION

Shortly after the convening of the legislature, Regent Edwin Taylor sent a carefully prepared petition which was introduced to the senate as Senate Petition No. 4 by Senator A. S. Cooke "in relation to the State University and the State Agricultural College." This was introduced, read, and referred to the committee on educational institutions, and on motion of Senator Cooke it was ordered that five hundred copies be printed. This was on January 20, 1909. This petition was printed in the *Kansas Farmer* for February 13, 1909, and was included by Doctor Walters in his history of the College, pages 199 to 202. On January 20 Senator Cooke introduced Senate Bill No. 186, "An act relating to Regents of the State University and to Regents of the State Agricultural College, placing limits upon the action of said Board." January 21 the bill was read the second time and referred to the committee on educational institutions.

Also on January 20, 1909, Representative W. L. Brown introduced House Bill No. 286, "An act relating to the Regents of the State University and to the Regents of the State Agricultural College, placing limits upon the action of each Board." This was read the second time the next day and referred to the house committee on educational institutions. These bills were identical, and their most significant provision was the transferring of all engineering work from the State Agricultural College to the University.

By this time the friends of the College in the institution and in Manhattan were thoroughly aroused. Meetings of the Manhattan Commercial Club were held and a campaign of publicity and opposition organized. The assistance of alumni and other friends of the College throughout the state was enlisted, and members of the legislature were swamped by hundreds of letters protesting against the proposed change. The *Industrialist* for January 30, 1909, carried considerable information bearing upon the question, much of it quoted from other periodicals.

A comprehensive table was published showing the classification of most of the courses given in the land-grant colleges not connected with universities, of which there were twenty-eight. Engineering courses were taught in all but those of Connecticut, Massachusetts, and Utah. In Massachusetts part of the land-grant support goes to the Massachusetts Institute of Technology, which is one of the strongest engineering institutions in the country. Most of these colleges offered curricula in mechanical, electrical, and civil engineering, respectively. The legality and the fitness of, and the service performed by the offering of such curricula had been asserted by the Association of Agricultural Colleges and Experiment Stations. This number also contained an article explaining, if not justifying, the low admission requirements of the institution under the title, "Take them as they come and set them going." Another article showed that the changes of curricula made by young men students after attending the College were in the direction of engineering to agriculture and not the opposite.

THE LEGISLATURE VISITS THE COLLEGE

The students of the College showed an intense interest in the issue at stake and did much in the way of writing to their parents, friends, and members of the legislature. On January 26 a mass meeting was held in the College auditorium at which it was voted to invite the members of the legislature to visit the College in a body at the expense of the students. Contributions of one dollar each were solicited. Representative Westgate presented the invitation in the house and Senator Hostrup in the senate, and it was

accepted. A special train was hired, which ran over the Union Pacific Railroad, February 3, reaching Manhattan at 10:30 a. m. The whole affair proceeded as one of the most dramatic episodes in the history of the institution. Long accounts of it were printed by the newspapers. The legislators were met at the railroad station by all the automobiles owned by citizens of the town and many more carriages. The visitors were taken to the College, where they were turned over to the students, who entertained them and showed them the different departments of the institution. After inspecting the stock and barns at the north part of the campus, they assembled at 11:30 a. m. in the auditorium to attend the chapel exercises. After the usual program of chapel, President Nichols called upon a number of the more prominent members for short speeches. While most of the speakers were rather non-committal in their remarks, they were very friendly, and Lieutenant Governor Fitzgerald expressed the feeling that taking anything away from the institution would be like stealing a red-hot stove. "All of us would be afraid to take hold of it if we wanted to. Don't you worry for fear that the legislature will take anything away from you."

After the exercises in the auditorium, the visitors were taken to the domestic science and art building, now Calvin Hall, and were given a dinner prepared and served by the young women students in the department of domestic science. The legislators had brought their wives with them, and more than three hundred sat down at a long table which stretched through the hall on the first floor of the building. The meal seemed to be a pleasing contrast to the food which the Topeka restaurants had been furnishing them.

After the dinner, the visitors renewed the inspection of the institution, giving special attention to the shops and engineering work. They were also impressed very favorably by the military drill of five hundred student cadets in uniform. At 4:30 p. m. they left Manhattan for the return trip. The University people followed suit by inviting the legislature to visit that institution, and it did so later.

The committee on educational institutions of the house reported February 11, 1909, recommending that House Bill No. 286 be not passed. Apparently the matter never came to a vote in the legislature. This ended for the time being the controversy concerning engineering at this College. It was not, however, settled, and President Waters found it on the doorstep when he took office the next July. A narration of the later history of the matter is given in the presentation of the principal events of the Waters administration.

ROOMS AND SCHEDULES

Increase in the enrollment manifested itself in no more unpromising a manner than by its demand for classrooms. Enlargement of the range of instruction, with the creation of classes that were rather small, especially in the junior and senior years, also operated in the same way.

In the early years of the College all work was given before the noon meal. As industrial work was introduced, more or less of that was placed in the afternoon. The farm and garden industrial required during the Fairchild administration was familiarly designated as "P. M.," without creating ambiguity. The period began at 1:30 p. m. and continued to 3:30 p. m. There were five periods in the morning, each fifty minutes in length, five minutes of this being for changing classes. The time thus covered was from 8:50 a. m. to 12:55 p. m. Chapel exercises were at 8:30 a. m.

As the pressure on the program increased, more industrial and laboratory work was pushed to the afternoon. In 1898 the obnoxious fifth hour was cut from the morning schedule, and by the fall of 1899 part of the laboratory work in bacteriology, chemistry, and zoology was placed in the afternoon, as well as industrials in most lines, and drawing. Preparatory academic work was also accommodated there.

Following the practice of allowing two full hours for the farm and garden industrial, other industrial work in the afternoon was placed on the same basis. There were four periods as follows: 1:30 to 2:30, 2:35 to 3:35, 3:50 to 4:50, and 4:55 to 5:55. The fall of 1903, however, two-hour periods were provided with a five-minute interval between them, 1:30 to 3:30 and 3:35 to 5:35. All academic classwork was on the fifty-minute basis, which involved a double schedule in the afternoon, with more or less confusion as a result.

Teachers of subjects not carrying accompanying laboratory work, and those who had little or no definite duties aside from teaching, were very reluctant in consenting to have any of their classes in the afternoon, but as the number of classes increased more rapidly than did the classrooms, utilization of the afternoon hours for academic classes became imperative. At first this was limited to preparatory classes, and characterized the winter term more than the others because of the pressure for space created by short-course students.

In February, 1904, a new schedule was adopted which equalized the class periods throughout the day. Each used fifty minutes, of which five were allowed for changing classes. Chapel exercises occupied fifteen minutes, 8:15 to 8:30, and the "first hour" began

at 8:35. The noon period was from 11:50 to 1:05 when the "fifth hour" began. Military drill was given at the "seventh hour," 2:45 to 3:30, but classes for students not in drill were also set for that time. This schedule remained in effect until 1910, when all class periods were made one hour in length, including a five-minute interval.

By the close of this administration about fifty recitations in academic subjects were held in afternoon periods, and the Monday holiday was being encroached upon. With the beginning of the next administration, Monday laboratory classes were numerous, and the use of all six of the week days for classes well established. In later years with the increase in the number of athletic contests, Saturday afternoon has been kept free from classes of any kind, and the Monday holiday replaced by the Saturday half holiday, without definite action to that end.

BUILDINGS

Concurrently with the increase in the demand for space, President Nichols was highly successful in obtaining appropriations for buildings. The legislature of 1899 had made an appropriation for a building for agricultural instruction in which was incorporated an up-to-date plant for dairy manufactures. A barn for dairy cows was also provided. These were erected in 1899-00.

Buildings for which President Nichols, with the approval of the Board of Regents, obtained appropriations during his administration are listed below, with the year of the expiration of the appropriation for the completion of the erection of each, and its cost.

Rebuilding old chemistry building, 1902, \$5,000. For use as women's gymnasium.

Denison Hall, 1902, \$70,000. Destroyed by fire, August 3, 1934.

Fairchild Hall enlargement, 1903, \$10,000.

Chemistry Annex No. 2, 1904, \$15,000. Erected for dairy manufactures and so used until 1923.

Auditorium, 1904, \$40,000.

Engineering Shops enlargement, 1905, \$5,000.

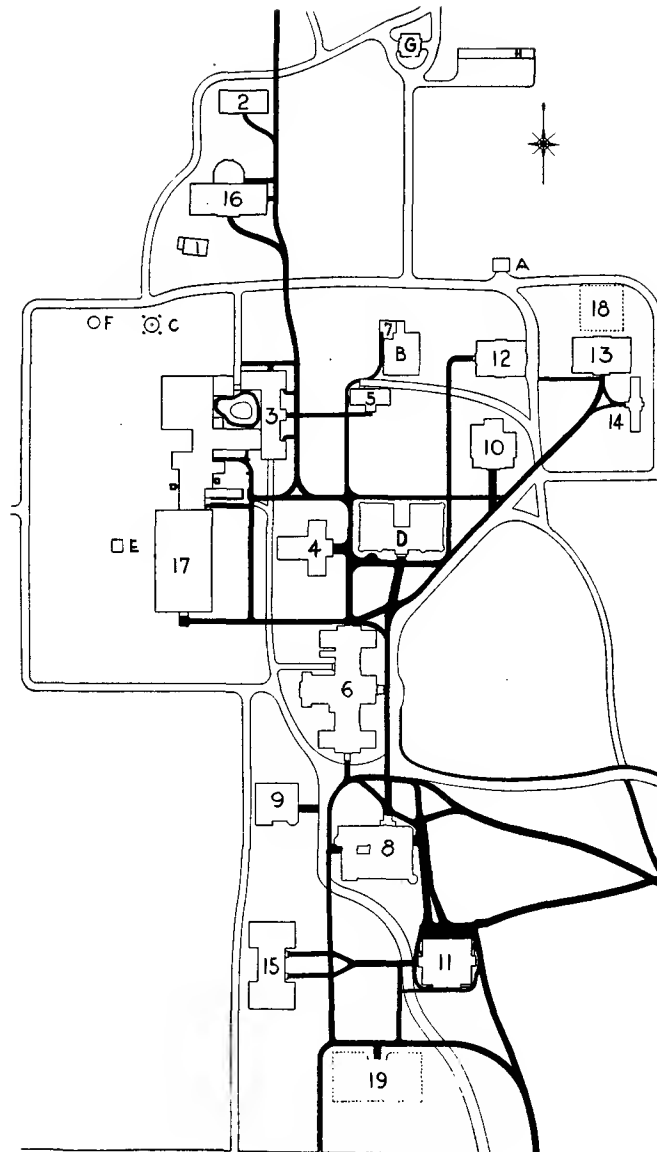
Dickens Hall, Greenhouses, and equipment, 1907, \$50,000. For horticulture and botany.

Veterinary Hall, 1908, \$70,000.

Calvin Hall, 1908, \$70,000. For home economics.

Engineering Hall, east wing, 1909, \$80,000.

The appropriation for Nichols Gymnasium was obtained in



MAP OF THE CAMPUS 1909

1909, but it was erected in 1910-11, by the next administration, and an additional appropriation was required for its completion.

In addition to these significant buildings, the plant museum structure southeast of Dickens Hall was built, 1907. The greenhouse attached to the old Horticulture Hall, now (1939) Illustrations Hall, was removed. An appropriation was obtained for the six-section greenhouse north of Dickens Hall which was erected in 1910.

A two-story stone seed house was built in 1906, but its unfortunate location required its removal when the east wing of Waters Hall was built in 1913.

One of the mixed calamities of this administration was the burning of the chemistry building, which took place May 31, 1900. Some of the apparatus and museum material was saved, but the interior of the building was ruined. It was only one story in height, and the walls were practically uninjured. An appropriation was made by the legislature of 1901 which provided for the reconstruction of the building for use as a gymnasium for the young women students. It was used for that purpose until the completion of Nichols Gymnasium in 1911, when it was turned back to the chemistry department, by which it was used until 1939 as Chemistry Annex No. 1. The building had been entirely inadequate for the needs of the department, and efforts had been under way to obtain an appropriation for a building for physical science. The loss of the old building made another building more imperatively necessary, and an appropriation was obtained for the construction of the building later designated as Denison Hall. This was occupied by the departments of chemistry, physics, and electrical engineering in 1902.

MAP OF THE CAMPUS 1909 (Opposite Page)

Map showing location of buildings, roads, and walks on the campus in 1909. The buildings are numbered in the order of their erection.

(1) Residence of the custodian, erected by Mrs. N. O. Preston in 1866. (2) Armory, erected in 1873 as one wing of a barn. (3) Mechanics hall, the original shops structure, erected in 1875, and extensive additions. (4) Gymnasium for women, erected in 1876 as a chemical laboratory. (5) Old Horticulture Hall, erected in 1876. (6) Anderson Hall, erected 1879-1885. (7) Horticulture and entomology offices and laboratory, erected in 1888. (8) Fairchild Hall, erected in 1894. (9) Kedzie Hall, erected in 1898. (10) Agriculture Hall, erected in 1900. (11) Auditorium, erected in 1904. (12) Dairy Hall, erected in 1904. (13) Horticulture Hall, erected in 1907. (14) Plant museum, erected in 1907. (15) Domestic Science and Art Hall, erected in 1908. (16) Veterinary Hall, erected in 1908. (17) East section of Engineering Hall, erected in 1909. (18) Greenhouses, erected in 1910. (19) Nichols Gymnasium, erected in 1911. (A) Horticultural barn, erected in 1889. (B) Propagating houses, erected in 1888. (C) Water tower, erected in 1904. (D) Physical Science Hall, erected in 1902. (E) Gas producer. (F) Gasometer. (G) Seed house. (H) Horse sheds. None of the features lettered on this map now exist on the campus excepting the water tower.

LAND

In addition to buildings, great additions were made to the land owned and the equipment of departments during this period. Much of this was incidental to the work of the Agricultural Experiment Station. In 1903 more land was purchased across the road north of the campus. This included the Briggs tract of eight acres in lot 18 of section 7, township 10, range 8, which cost \$1,200, and, from the Williston farm, parts of lots 4, 5, 8, and 9, 95.8 acres, for which \$8,800 was paid.

In 1909, land to the northwest was bought which now constitutes the agronomy farm. This is the east half of section 1, township 10, range 7. The north quarter, 161.8 acres, was bought of Marlow Ingraham for \$21,843. The south quarter, 160 acres, was owned by Oliver A. Hutchings, and cost the College \$24,000.

In 1899 Prof. S. H. Gage, of Cornell University, made the College a gift of 240 acres of land in Ford County. This was never used by the College. In 1905 its sale at not less than ten dollars an acre was authorized.

April 6, 1906, the Board authorized Mr. John C. Nicholson to prosecute its claim for 7,686.47 acres of land to which it was believed the College was entitled under the original Morrill Act. This law provided that if a college selected endowment lands "from those which have been raised to double the minimum price in consequence of railroad grants, they shall be computed to the states at the minimum price and the number of acres proportionately diminished." Some of the land was thus located in proximity to the route planned for a railroad, and was consequently computed on the basis of one acre being equivalent to two not affected by a railroad grant. Later the route of the road was changed, and the College land lost its supposed additional value, and in equity reverted to its original minimum rating. As early as 1871, and at later dates, the Board took action looking toward obtaining the balance of 90,000 acres. However, the general land office at Washington refused to allow the claim. In 1888 a joint resolution introduced by John A. Anderson was passed by Congress, granting the state the privilege of selecting the rest of 90,000 acres, but this was vetoed by President Cleveland on the ground that the College had been compensated by the location of land-grant railroads elsewhere, through which lands previously selected by the College had been raised to double minimum value. Finally, under the legal advice of Mr. Nicholson and the legislative service of Congressman Wm. A. Calderhead, Congress passed an act approved by President Theodore Roosevelt, May 29, 1908, validating the claim. The land was

located in 1909, but was of little value as all the good land in the State had been taken by settlers many years before.

WATER SUPPLY

The water obtained through the facilities of the Manhattan water works system, while of the greatest service to the College, was a continuous expense, and its quality left much to be desired. In 1903 an appropriation of \$10,000 was obtained to provide a water works system of its own for the College. A well was sunk at a location near the east side of the campus and north of the Vattier Street entrance which furnished a supply of water which although hard was of good quality otherwise. Water mains were laid, and a tower supporting a tank was erected. This at first stood at a point about two hundred feet east of its present position, to which it was moved in 1908. Considerable trouble was experienced with the well. For the most part this difficulty remained to be handled by later administrations and resulted in locating wells near the southeast corner of the campus.

SEWER

The Will administration had in 1899 obtained an appropriation of \$3,000, for the construction of a sanitary sewer from the College to the river. In 1900 the sewer was laid from the College buildings to the Kansas River. An arched bridge carried it over the Howard ditch and after crossing Anderson Avenue, it was taken down Sixteenth Street. Consent to the use of this route was obtained from Riley County and the city of Manhattan. This improvement permitted abandonment of cesspools in use.

FINANCES

The financial strength of the institution was greatly increased by the passage by Congress of the so-called Nelson Amendment. Although its provisions were originally embodied in a separate bill, it was attached to the appropriation bill for the Department of Agriculture, February 21, 1907. In this form it was passed by Congress, and approved by President Theodore Roosevelt, March 4, 1907. This measure gave additional funds under the terms of the Morrill Act of 1890. Beginning with \$5,000 the first year, the amount was increased by \$5,000 each year for four years until a maximum of \$25,000 was reached. This amount has been appropriated each year since. The Nelson Amendment included a provision giving the land-grant colleges authority to use a portion of the money for providing courses for the special preparation of in-

structors for teaching the elements of agriculture and the mechanic arts. The legitimacy of providing for teacher training to at least that extent was thus definitely recognized by Congress.

By an act of the legislature of 1903, additional support for college instruction was obtained by a provision that an incidental fee of three dollars a term should be paid by each Kansas student, and one of ten dollars by each student from outside the state. Non-resident students were also charged an enrollment fee of ten dollars. This was the beginning of a requirement that students meet in part the cost of their own education, which in later years has been increased to a much greater sum. At that time there were three terms in the college year.

THE AGRICULTURAL EXPERIMENT STATION

Under the original organization of the Agricultural Experiment Station, its activities were determined by a Station council. Director Shelton was a purely executive officer with no detailed control of work outside the farm department. After he left, January 1, 1890, this general work was placed in charge of the president, who was designated as chairman of the Experiment Station council. On the appointment of Professor Nichols to be acting president, J. T. Willard, chemist of the experiment station, was made chairman of the council, July 13, 1899. Conforming superficially to the views of the office of experiment stations, Washington, D. C., Mr. Willard was made director of the Station, January 18, 1900, his duties being defined as follows: "He shall be the executive officer of the station and as such shall attend to its general business and correspondence, the printing, binding, and distribution of its publications, and such other matters as the Board or council may direct, but in all things shall be subject to the action of the council." At that time the council consisted of the president of the College, chairman *ex officio*, and the agriculturist, botanist, chemist, entomologist and horticulturist, and veterinarian. It was provided that "all experiments shall be undertaken with the advice and consent of the council, but the details of their performance shall be under the control of the departments in charge of them, respectively. The council shall hold regular monthly meetings and such special meetings as may be necessary."

DIRECTOR BURKETT'S WORK

The director of the office of experiment stations was not satisfied with this and continued to advocate the appointment of a director who should have supervision of the entire work of the station in

its different departments and at its branch stations. Some members of the Board of Regents shared this belief, and it was finally voted to elect a director with such powers. After considerable search and the consideration of several others, Dr. Charles William Burkett was elected director, and he assumed his duties September



C. W. BURKETT
Director of the Agricultural Experiment
Station, 1906-1908.

1, 1906. The Board had, in connection with the provision for a director with general powers, adopted a long statement concerning the management of the Experiment Station in which the functions of the Station council were preserved; but when Director Burkett took charge, he had it replaced by another which practically abolished the Station council and made the director supreme. Director Burkett introduced some valuable features in respect to organization of Station projects and preservation of records of results, and showed that full power was consistent with cooperation.

At the meeting of the legislature the winter of 1907, Director

Burkett spent much of his time in Topeka and succeeded in obtaining the passage of two important laws, one governing the sale and inspection of fertilizers and the other governing the sale and inspection of feeding stuffs. He also supported a third law which was designed to provide for the discovery of superior varieties or strains of wheat in foreign countries and the making of these available to Kansas farmers. An appropriation was made to carry out the provisions of this act, and under authorization of the Board of Regents Director Burkett left for Europe in June, 1907, and was gone about four months traveling in Turkey and Russia. He gave an account of his observations in Press Bulletin No. 164, which was reprinted in part in the Twenty-first Annual Report of the Experiment Station. He collected wheat from seventeen different sources and imported it in quantities of from three pounds to three bushels, mostly one peck each, and totaling about twelve bushels.

J. T. Willard was acting director during Director Burkett's absence and to provide legality for his acts was named vice-director, June 19, 1907. It became his trying duty to put into effect the

laws concerning the registration, analysis, and inspection of feeding stuffs and fertilizers.

that purpose. His conclusions were published in Press Bulletin No.

The characteristics of wheat grown in Alberta, Canada, were studied by Prof. A. M. TenEyck, who was sent to the province for 157, and were not favorable to the importation of Canadian wheat.

In pursuance further of the provisions of the seed wheat law, Prof. Herbert F. Roberts, botanist of the Experiment Station, made a trip to Europe the summer of 1908. His investigations were in Rumania, Hungary, Germany, and Sweden, and consisted largely in the investigation of methods of wheat breeding. He was gone about three months, from May 9, 1908.

March 23, 1908, Director Burkett presented his resignation to take effect September 1, when he assumed an important editorial position with the Orange Judd Company. The problem of the directorship again confronted the Board of Regents and was not solved until December 4, 1908, when Edwin H. Webster was elected. Director Webster began service December 22, 1908, and served into the next administration.

FORT HAYS BRANCH EXPERIMENT STATION

One of the major events occurring during this administration was the act of Congress ceding to the State of Kansas the Fort Hays military reservation for use in the establishment of a branch Agricultural Experiment Station, a branch of the State Normal School, and a public park. A full history of this movement beginning in 1895, written by J. T. Willard, was published in the Fifteenth Annual Report of the Agricultural Experiment Station, 1901-02, pages XVI-XXI.

The legislature of 1901 passed "an act relating to the Fort Hays military reservation, locating thereon an experimental station of the State Agricultural College and a western branch of the State Normal School, providing for the preservation of the native timber land for a public park, and making appropriation therefor." The law designated the division of the land to be made between the Agricultural College and the Normal School, and placed the Board of Regents of the College in charge of the Experiment Station, with power to adopt such measures as might be necessary to place it in successful operation and to preserve the land as a public park upon which the native timber was then growing.

J. G. Haney, a graduate of the College, for several years assistant in field and feeding experiments, and later agricultural agent of the Chihuahua and Pacific Railway Company, was appointed

superintendent of the branch station, and entered upon his duties March 29, 1902. These were performed with his accustomed energy, initiative, and ability.

Difficulties of various kinds existed and developed in the opening and operation of this branch station which cannot be entered upon at this point. The Board provided that under the direction of the Board of Regents the Experiment Station council at Manhattan should be responsible for supervision of the experimental work of the station. The Board voted to break about 340 acres at first. Superintendent Haney's connection closed December 31, 1904, and Mr. O. H. Elling was put in charge. Mr. Elling had been foreman for a year and a half. He was never formally elected superintendent, but had all of the responsibilities of the position until his resignation in March, 1907. In May, 1907, Mr. C. K. McClelland, from the office of farm management of the United States Department of Agriculture, arrived and assumed the duties of superintendent. He held this position until January 1, 1910. In June, 1909, George K. Helder, secretary at the branch station, was elected assistant superintendent.

PRAIRIE DOG REPRESSION

The increase of prairie dogs in the western part of the State had become such as to make them very destructive in certain regions. In 1901 the legislature passed "an act to provide for the destruction of prairie dogs and gophers, for making experiments with that in view, and making an appropriation therefor." An appropriation of \$5,000 was made, and the law provided that the Regents of the College should select some competent person to direct and conduct experiments with reference to the repression of the pests. The Board of Regents employed Prof. D. E. Lantz as a field agent to take charge of the experiments under the direction of the council of the Agricultural Experiment Station. Experiments began about September 1, 1901. Arrangements were made to supply citizens of the State with poison that had been found effective, and distribution of this began January 15, 1902. This service, developed in various ways, has been continued until the present time (1939).

THE ADAMS ACT

The possibility of enlarging and improving the work of the Agricultural Experiment Station was greatly enhanced by Congress through the provisions of the Adams Act which was approved March 16, 1906. The Station had since 1888 received \$15,000 a year from the federal government. This was primarily designed

to meet the expenses of investigation. The demand for information upon agricultural subjects was such that funds received under this act had come to be used to a greater or less extent for the publication and distribution of information which was compiled from various sources, and often had no other connection with the station by which it was issued. Under the Adams Act an appropriation of \$5,000 to each state was made for the year ending June 30, 1906. Each year thereafter the appropriation was increased by \$2,000 until a maximum of \$15,000 was reached. This was "to be applied only to paying the necessary expenses of conducting original researches or experiments bearing directly on the agricultural industry of the United States, having due regard to the varying conditions and needs of the respective states and territories." It was the intention of the proponents of this act that funds provided under it should be used strictly for original research and were not to be diverted under any pretense to the provision of merely timely informational matter. Previously, those wishing to pursue investigations the immediate application of which in practical farming was not apparent were at a great disadvantage. The so-called practical held a whip hand over the scientific. The Adams Act provided funds especially for the relief of this type of experiment station workers.

DAIRY COMMISSIONER

The legislature of 1907 created the office of state dairy commissioner and specified in detail his powers and duties. It was provided that the commissioner should have his office at the State Agricultural College. Prof. J. C. Kendall was appointed state dairy commissioner and held the office until January 1, 1908, when he became professor of dairy husbandry, and D. M. Wilson was appointed dairy commissioner. Through this officer the College had much influence in promoting improved conditions in the dairy industry.

FORESTRY

Experiments in the growth of forest trees had been carried on at the College since the earliest period. The importance of increase in tree coverage in the state had been recognized by the establishment of forestry stations at Ogallah, Trego County, and Dodge City, Ford County, under the provisions of an act of the legislature of 1887. Fruitless discussion was had from time to time looking toward transferring the operation of these stations to the Agricultural College. The legislature of 1909 passed an act establishing a "division of forestry" at the College, and vesting control of the Dodge City and Ogallah stations in the Regents of the College in-

stead of the State Executive Council. Under this act, seed breeding, tillage experiments, and demonstrations were also permitted at these points in so far as they did not interfere with the work in forestry. The Board designated Prof. Albert Dickens to be state forester, and provided for the appointment of an assistant forester. Prof. Robert E. Eastman was appointed to this position later.

FARMERS' INSTITUTES

The financial support of farmers' institutes was materially increased during this administration beginning with 1899-00, and the number of institutes held was correspondingly larger. As the year 1905 marks the introduction of a new system for handling farmers' institutes, the following table showing the number held each year from 1881 is presented:

1881-82..... 6	1889-90..... 8	1897-98..... 30
1882-83..... 5	1890-91.....11	1898-99..... 62
1883-84..... 7	1891-92.....11	1899-00.....135
1884-85..... 6	1892-93.....11	1900-01.....156
1885-86..... 6	1893-94.....17	1901-02.....102
1886-87..... 8	1894-95.....22	1902-03..... 88
1887-88..... 8	1895-96.....22	1903-04..... 58
1888-89.....10	1896-97.....19	1904-05..... 55

The work in farmers' institutes continued to be handled by a committee of the faculty until October 10, 1905, when Mr. John H. Miller began service as field secretary and organizer of farmers' institutes. His work in this capacity was highly efficient, and July 17, 1906, he was given the title, Superintendent of Farmers' Institutes. The work continued under his general direction with the co-operation of the faculty and its committee into the next administration. This was the beginning of the Division of College Extension. An extended history of farmers' institutes as originated and conducted by the College from 1868 up to the time of the appointment of Mr. Miller was written by J. T. Willard and printed in the *Industrialist*, Volume 32, 1905-06, pages 131-136, 147-151, and 179-183. The *Industrialist* also contains many historical articles concerning farmers' institutes written by Professor Walters and others covering various periods.

In April, 1905, the St. Joseph and Grand Island Railway Company ran a special dairy train over its system. This was equipped by the College, and Prof. Oscar Erf made one-hour talks to dairy-men at each station. The train consisted of a lecture car, three

exhibit cars for showing apparatus and dairy products, and a Pullman. It was the first time that anything of the kind had been done in the State.

President Nichols persuaded the officers of the Rock Island railway system to operate a farmers' institute train in November, 1905. This covered the entire Kansas mileage of the system, a length of 1,030 miles. It made thirty-minute stops at 135 stations. The train consisted of an engine, two ordinary coaches used as audience cars, a business car for the use of the College party, and another for the railroad officials accompanying the train. In the business car a stateroom and berths provided accommodations for a party of seven so that physical needs were perfectly provided for. The trip required two weeks. At each stop a program on corn was usually given in one of the audience cars and one on wheat in the other. Evening sessions were held in halls in the towns where night stops were made. Messrs. TenEyck, Willard, and Shoesmith made the entire trip. President Nichols and Regents McDowell and Berry, representatives of several agricultural papers and newspapers, and a number of officials of the Rock Island were present for a part or all of the time.

The entire expense of this carefully organized trip was borne by the Rock Island company, including boarding the College speakers. Many of the meals were prepared and served in the business car.

In December an agricultural train was operated over the central branch of the Missouri Pacific. Stops of one or two days were made at the towns where programs were given. Other series of farmers' institutes were held during the season of 1905-06, in which the railroads cooperated significantly along the lines of the Union Pacific, the Atchison, Topeka and Santa Fe, the main line of the Missouri Pacific, and the St. Louis and San Francisco. Trains of this character became more frequent in succeeding years.

THE CONTROVERSY CONCERNING AGRICULTURE

A major condition extending throughout the greater part of the administration of President Nichols was an unjust fight made upon him, alleging that he was indifferent to the agricultural work of the institution, and that he hampered those who were directly responsible for it. He had in fact special interest in agriculture, having grown to manhood on a fine Iowa farm which his father operated with excellent judgment and success. From the beginning of his administration the agricultural work was more liberally supported financially than ever before, not only in respect to amounts appropriated, but amounts compared with those allotted to other departments. Unfortunately, Professor Cottrell, while an able and

enthusiastic man in his department and a good representative in farmers' institutes and other public meetings of farmers, did not take kindly to limitations upon financial expenditures in support of his departmental work. This at once brought him into conflict with President Nichols and finally led to drastic action by the Board of Regents providing that any department head who exceeded his departmental appropriation without permission to do so would thereby forfeit his position.

REGENT COBURN ATTACKS NICHOLS

F. D. Coburn, secretary of the State Board of Agriculture, was then at the height of his repute in the State and nation. He assumed the championship of agriculture at every opportunity and was attentive to, and sympathetic with, the complaints of the professor of agriculture. Governor Stanley appointed him to be a Regent of the College for the four-year term beginning April 1, 1901. This was an appointment which could not be confirmed, as the senate was not in session. Secretary Coburn had served previously on the Board from 1883 to 1885, and his appointment in 1901 was generally regarded as a very good one. He at once assumed a very active part on the Board. Regent McDowell was elected president of the Board and Regent Coburn vice-president. President McDowell appointed Regents Coburn and Stewart with himself to be the standing committee on the Experiment Station, Regent Coburn being chairman, and easily the dominating personality. At a meeting of the Board June 14, 1901, the Experiment Station committee made a long report embodying thirteen recommendations. Of these, all but one were adopted almost without amendment.

Action upon Section 12 was postponed from time to time and was finally rejected at the September meeting, Regent Coburn being the only one who voted for it. Regent Hunter was absent, and Regents McDowell, Fairchild, Satterthwaite, Stewart, and Nichols voted against it. The gist of the recommendation in Section 12 was that seed breeding be transferred to the farm department, the department of botany be discontinued in Experiment Station work, and the funds then allotted to it be devoted to seed breeding by the farm department; also that \$900 be transferred to the farm department from the allotment usually made to the department of horticulture and entomology. It further provided that an assistant chemist should be employed to make such analyses as might be directed by the professor of agriculture. His work, however, was to be done in the department of chemistry and under the direction of the chemist of the Station.

It was unfortunate that Professor Roberts, head of the depart-

ment of botany, had not had farm experience, and impressed many as lacking in practicality in respect to his work. The radical changes embodied in Section 12, however, were not supported by any member of the Board excepting Regent Coburn, and this signal defeat embittered relations between him and President Nichols, which continued to the end of the Nichols administration. The situation has been not inaptly referred to as the Coburn-Nichols feud.

Regent Coburn continued to maintain opposition to President Nichols, and at the June, 1902, meeting of the Board he introduced a resolution providing for the securing of a new president possessing certain characteristics which he described in considerable detail. The resolution, however, was rejected by the Board.

REGENT COBURN RESIGNS

After the election of Willis J. Bailey as governor, it was publicly printed that he would not send Mr. Coburn's name to the senate for confirmation as a Regent. A little later Secretary Coburn tendered his resignation on the ground that if he, himself, had been elected governor he should wish to have a free hand in naming Regents for the Agricultural College. The resignation was accepted, and R. J. Brock appointed to serve in his place.

The retirement of Secretary Coburn from the regency did not end his opposition to the policy of the Board then in control. The *Kansas Farmer* maintained for months a vigorous fight also. Resolutions in identical terms were introduced at the winter meetings of several of the organizations identified with agriculture and were passed by some of them. They were introduced at the meeting of the Kansas Improved Stock Breeders' Association. President Nichols was at that meeting and made a speech defending the Board and presented figures designed to show that agriculture had been pushed forward and not pulled back, that, in fact, other branches had been restricted by the efforts to give agriculture prominence. The *Capital* reported that he said that he would resign and leave the state if it could be shown that he had attempted to cripple agriculture or talked in favor of any such policy. The *Capital* also printed an editorial in support of President Nichols and commending the State Board of Agriculture and the Improved Stock Breeders' Association for refusing "to adopt the usual resolutions worked into every agricultural meeting by the *Kansas Farmer* and some of its immediate friends criticizing in glittering generalities the management of the Agricultural College." As a matter of fact, of course, the individual members of these associations had no personal knowledge of conditions at the College upon which to base a vote. Affirmative action on the resolutions rested wholly upon confidence in Secretary

Coburn. While this must be regarded as a high compliment to him, his attitude was so unsupported by facts that this opposition, continued through seven years, was probably the most unfortunate action of his life. It was greatly regretted by many of his friends.

RESIGNATION OF PRESIDENT NICHOLS

President Nichols ordinarily was a man of few words, oral or written, but upon occasion spoke with force and fluency and at the necessary length. He was quiet and courteous in manner, and habitually, in respect to required procedure or duties of members of the faculty, said "should" instead of "must." There are always some who take advantage of such consideration and can be handled only by clearly mandatory rules which they always resent. President Nichols was inclined to regard such persons as beyond redemption, and in some cases may have omitted holding conferences that might have effected reformations, and even elicited friendly cooperation that would have been very helpful.

With the mathematical mind of a physicist, President Nichols' tendency was to reduce expression to its lowest terms, a procedure comparable to the development of a mathematical formula. This brevity did not always give time for the auditors to grasp his meaning. Most persons require dilution of ideas by verbiage, and repetition of them in another form. Still, he was able in conference with members of the legislature to convince them of the needs of the College to the extent of obtaining appropriations for significant buildings averaging one each year of his administration, and at the same time appropriations for current expenses increasing from \$25,000 for 1902 to \$200,000 for 1911.

The president's pleasure in mechanical construction and efficient orderly methods and procedure was expressed in many ways of more or less importance. Of these may be mentioned the introduction of a card system for student records, and a card report by each teacher each term of the enrollment in each of his classes. While the former has been replaced, the latter with some amplification is still (1939) continued. These cards constitute a continuous record showing what subjects were actually being taught at a given time, as distinguished from what were offered in curricula or as electives, or for graduate study. These records of the teaching activities of the personnel are invaluable. President Nichols enhanced the value of these reports by publishing in the *Industrialist* each term, a tabular exhibit showing the instructor for each class, the class period or periods used, and the enrollment. Statistical compilations published by him in the biennial reports will be of high utility permanently.

During this administration the undue ebullition of animal spirits was shown in several student pranks and class conflicts. Such demonstrations have occurred in all periods of the history of the College, but are less frequent now than formerly. President Nichols handled these with forbearance and consideration, while at the same time he made no concessions to disorder. It is related that at one time when disciplinary treatment had been imposed on certain members of a class, a committee came to him with the statement that it seemed likely that the entire class would leave College. The president looked across his desk and said, "Well, as far as I know the trains are running on time." The class did not go.

Although in general the College was in a fine degree of efficiency and was in high estimation throughout the state, opposition to the president by certain persons outside the College was supported by a few members of the faculty who thus found aid and comfort in situations for which the president was blamed whether rightly or wrongly, and for which as often as not he should have been commended. In the course of years this extra- and intra-mural fault-finding infected the Board of Regents so that, on a bare majority vote, the resignation of the president was requested March 21, 1908, but it was not to be effective until June 30, 1909. This gave the Board fifteen months in which to find a successor. This period proved to be one of the most quiet and cooperative on the part of students and faculty of any in the administration of President Nichols, and his leaving was regretted by nearly all.

THE COUNCIL OF DEANS

President Nichols came to the College in 1890 when the College buildings were limited to the "old barn" or armory, now Farm Machinery Hall, the first building erected for shop work, now greatly enlarged, the little horticultural building, now Illustrations Hall, the chemical laboratory, later Chemistry Annex No. 1, and Anderson Hall. The total number of students enrolled the preceding year was 445. It had grown under his observation and through later years under his direction, and he was acquainted with every physical feature of the institution, and with each member of the teaching and research force. He signed all the assignments of students to their College work and was at least nominally responsible for each. The total number of students had become more than 2,000.

Mr. W. E. Blackburn was one of the most constructive members that the Board of Regents has ever had. He was throughout a loyal supporter of President Nichols, but he felt that the welfare of the institution would be promoted if the responsibility for its manage-

ment were shared with others. He advocated the establishment of a Council of Deans and convinced the remainder of the Board that it was advisable. A committee consisting of Regents Blackburn, Taylor, and Griffith was appointed March 21, 1908, to report on a plan of organizing the College into deanships if it seemed feasible.



E. H. WEBSTER

Dairy production and manufactures, 1901-1903. Dean, Division of Agriculture and Director of the Agricultural Experiment Station, 1908-1913.



C. M. BRINK

English language and literature, 1902-1916. Dean of science, 1908-09. Dean of the College, 1909-1916.

The committee reported July 30, 1908, and its recommendations were adopted. The plan provided that the members of the Council should be appointed by the president with the approval of the Board and hold office during the pleasure of the president, exercising such authority and performing such duties as the president might direct. It was provided that the director of the Experiment Station should be dean of agriculture *ex officio*, and hence he was not to be appointed by the president.

In addition to the dean of agriculture the Board provided for a dean of science who was also to be the assistant to the president, a dean of mechanic arts, and a dean of women. The president was *ex officio* to be chairman of the Council.

At that time the directorship of the Experiment Station was vacant, and Professor Willard, vice-director, was acting as director, and thus served for the time being as acting dean of agriculture. Edwin H. Webster was appointed director of the Experiment Sta-

tion and entered upon his duties December 22, 1908, and thus became dean of agriculture. In that deanship were incorporated all the departments which had charge of projects of the Agricultural Experiment Station; namely, agronomy, animal husbandry, bacteriology, botany, chemistry, dairy husbandry, entomology, horticulture, poultry husbandry, and veterinary medicine.



MARY P. VAN ZILE

Domestic science, 1908-1914. Dean of Women, 1908—. Dean, Division of Home Economics, 1912-1918.



E. B. McCORMICK

Mechanical engineering, 1901-1910; power and experimental engineering, 1910-1913. Dean of Mechanic Arts, 1908-1912. Dean, Division of Mechanic Arts, 1912-1913. Director of Engineering Experiment Station, 1910-1913.

President Nichols appointed Prof. Clark M. Brink to be dean of science and assistant to the president. This deanship included the departments of economics, English, history, languages, mathematics, military science, music, philosophy, physics, and preparatory work. He appointed Prof. Edmund B. McCormick dean of mechanic arts. This deanship included the departments of architecture and drawing, civil engineering, electrical engineering, mechanical engineering, and printing. Mrs. Mary Pierce Van Zile was named dean of women, and the departments of domestic science, domestic art, and physical training were assigned to that deanship. At that time physical training was required only of young women.

President Nichols had resigned the preceding March, effective July 1, 1909, and he made very little use of the deans, as such. He continued to handle the work of assigning students as he had in the

past. The Council of Deans, however, was asked to consider the failures and low grades of students and to take action in such cases.

On motion of Regent Blackburn the constitution of the Council of Deans was reorganized June 14, 1909. It was provided that "The members of said Council of Deans shall be the president of the College; dean of the College, who shall be assistant to the presi-



J. T. WILLARD

Chemistry, 1883-1887; 1888-1922. Director of the Agricultural Experiment Station, 1900-1906. Dean of Science, 1909-1912. Dean, Division of General Science, 1912-1930. Vice-president, 1918-1935. College Historian, 1936—.

dent; dean of science; dean of agriculture, who shall also be the director of the Experiment Station; dean of mechanic arts; dean of women." It was also provided that the several members of the faculty should be associated with the deans in accordance with an attached list, and that meetings with these should be held as might be deemed necessary by the respective deans. The departments were assigned to the several deans in accordance with their relation to the work of the deans, respectively. Thus the head of a fundamental subject, such as chemistry or physics, was expected to serve in conferences called by any one of two or more deans.

The new arrangement provided for an additional dean, and Dean Brink was made dean of the College and continued as assistant to the president, and Prof. Julius T. Willard was made dean of science.

Dean H. J. Waters was elected president June 18, 1909. Some of the deans realized that the new president was accustomed to the administration of an educational institution through a Council of Deans, and that as he had very little knowledge concerning the institution to which he was coming, he would necessarily depend greatly upon the deans in his administration. In the original establishment of the Council of Deans it had been provided that they should perform such duties as might be assigned them by the president. As President Nichols had done little in this direction, it appeared to some of the deans that it would be well to ask him to assign certain duties to them which might be assumed by President

Waters as existing, and used as a starting point in his administration. President Nichols assented cordially to this suggestion, and it was decided that the following duties, at least, should be under the control of the Council of Deans: (1) General charge of the assignment of students, (2) the graduate work, (3) approval of textbooks, (4) authorization of purchases for the library, (5) consideration of questions touching buildings and grounds, and (6) provision through the *Industrialist* for proper presentation of the several great fields of effort and activity of the College.

This assignment of deans to definite duties was signed by President Nichols. It was also transmitted to President Elect Waters and given his approval. In point of fact from the moment that President Waters took office he began adding to the duties and powers of the deans as a Council and as individual executives.

STUDENT COUNCIL

One of the progressive incidents of this administration was the establishment of the Student Council. At times when incidents of mass disorder of students occurred, it would be suggested that there should be some form of organization to facilitate discussion and adjustment. President Nichols saw that when a concrete case of disorder existed, the conditions were not favorable for adoption of anything likely to be satisfactory, but in the last year of his administration he encouraged and cooperated with a joint committee from the several classes, and most of the credit for the successful inauguration of a plan was due to him. A committee from the faculty conferred with the student committee, and a constitution was adopted which was approved by each of the classes. It was presented to the faculty by the president and approved June 12, 1909, and was nearly the last constructive act of President Nichols.

The Student Council began functioning the next September and, with changes of name, scope, and procedure, has remained to the present time, and on many occasions has demonstrated its practical value.

CHAPTER VIII

THE ADMINISTRATION OF HENRY JACKSON WATERS

JULY 1, 1909, TO DECEMBER 31, 1917

HENRY Jackson Waters, dean of the college of agriculture, University of Missouri, became president of this College, July 1, 1909. He had a national reputation as an investigator in animal nutrition, and as an administrator. Under his inspiration and direction the Missouri college had developed from one of no reputation to become one of the most important in the country. That a Republican Board of Regents, after a search of more than a year, should select a Missouri Democrat to head a Kansas institution was in itself strong testimony to the high reputation of Dean Waters. He came to the College at a time that proved to be critical in some respects, and he carried it through with distinguished success. When he resigned, there seemed to be no immediate problems to challenge a president, and he wanted "to go where the water was a little swifter."

President Waters was a man of the commanding executive type, handsome, able, aggressive, confident of his ground, fearless, and sufficiently ready in speech. He was a model of courtesy in manners, and had the southern regard for the conventions of society, as well as an insistence upon the practice of sound morality.

H. J. Waters was born and reared on a farm in northeast Missouri. He was graduated from the college of agriculture, University of Missouri, in 1886. At that period the college had a good faculty, but very few students. It is said that Waters was the only member of some of the classes. This afforded an unparalleled opportunity for him to get the most possible from his teachers and the curriculum. After graduation he stayed as an assistant and graduate student for two years, and then went to Pennsylvania State College as professor of agriculture. From this position he was recalled in 1895, to be dean of the college of agriculture in Missouri. The great variety of contacts given by this experience, supplemented by a year and a half of study and travel in Europe, so permeated with agriculture his intellectual capital and daily thought that any allegation of lack of sympathy with that industry would have been an absurdity. He was thus spared a type of criticism from which his predecessor had unjustly suffered.



HENRY JACKSON WATERS
President, 1909-1917.

RECEPTION FOR PRESIDENT AND MRS. WATERS

President Waters took up his duties quite unostentatiously. After a short visit early in July for preliminary arrangements, he was absent for some weeks. At the opening of the College year he apparently gave but little attention to routine affairs and did not always attend assembly exercises. He was, however, not unmindful of the advantage of elaborate social and official functions. On the evening of October 25, 1909, the faculty tendered a reception to President and Mrs. Waters. More people were present than at any similar function in the history of the College. All the college employees and their wives were invited, as well as several hundred alumni and citizens of Manhattan, including farmers from the surrounding area. It required nearly two hours for the guests to pass the long receiving line. The reception was held in the rooms of the domestic art department on the second floor of the home economics building, now Calvin Hall. The affair was a brilliant success and expressed to President and Mrs. Waters the cordial and sincere greetings of the college family and of the social circles of the city of Manhattan and vicinity.

INAUGURATION OF PRESIDENT WATERS

That the new president had something of a flair for the spectacular was shown by the fact that he provided for a formal inauguration into office, a ceremony which had not been employed for any of his predecessors.

The exercises were held November 11. Governor Walter Roscoe Stubbs participated, and he and other visitors were conveyed from the Hotel Gillett to the college campus in motor cars furnished by prominent and fortunate citizens. The automobiles were preceded by four companies of college cadets and the college military band. As the parade reached the campus, a salute of seventeen guns was fired by a detachment of the cadets in honor of the governor. In a motor car with the governor were Representative Charles F. Scott, Dean Walter Williams, and President Waters, and in other cars were Chancellor Frank Strong, Secretary F. D. Coburn, President Joseph Hill, Superintendent E. T. Fairchild, Dr. Septimus Sisson, and Regents of the College, Edwin Taylor, W. E. Blackburn, and Arthur Capper, and Regents of the University, C. F. Foley, William Allen White, and W. Y. Morgan.

Governor Stubbs presided over a program of exercises given in the auditorium. Five of these addresses were in the form of greetings from the University of Kansas, Frank Strong; from the State Normal School, Joseph H. Hill; from the public schools, Edward T. Fairchild; from the farmers of Kansas, Foster Dwight Coburn;

and from colleges and universities at large, Walter Williams, dean of the school of journalism, University of Missouri.

These greetings were followed by an address by Charles F. Scott, chairman of the committee on agriculture of the House of Representatives of the Congress of the United States, who spoke on "The Duty of the State and Nation to Agriculture and the Industries." The addresses by these distinguished speakers were really masterly discussions of the problem of technical education and the past and future work of the College. They were all printed in subsequent numbers of the *Industrialist*.

At the close of the morning exercises the distinguished visitors, members of the Board of Regents, and faculty were invited to the Domestic Science and Art Hall, where a luncheon was served by the college students of home economics under the supervision of their teachers.

At 1:30 the throng of visitors was entertained by the regiment of college cadets and the college band in a series of maneuvers on the campus. It was estimated that four thousand persons witnessed this part of the day's program.

Following the drill, an afternoon program was presented, at which the governor delivered an address on "The Duty of the State to Higher Education." The *Industrialist* reported that "his speech was delivered without notes or manuscript and was typical of his impetuous, truly Western nature. When he closed, the audience greeted him with vigorous applause."

Regent Blackburn, who was presiding, announced that congratulatory letters and telegrams had been received from a hundred or more colleges, universities, and educators all over the country. He read only two—that from the Chicago Alumni Association and one from Secretary Wilson, who congratulated the school and the State upon securing as president, a man of the caliber of Mr. Waters. Quoting the *Industrialist* again:

The formal installation of President Waters was a most impressive ceremony. Hon. W. E. Blackburn, the presiding officer, presented him to the Board of Regents, to the faculty, the alumni and students, the visitors, and to the immense audience. The President rose and bowed, but he had no chance to speak. The students sprang to their feet, the faculty waved their hats, the visitors rose, and all joined in a great ovation to the newly-installed executive, during which the College song, "Alma Mater," was sung, followed by a thundering College yell that shook the rafters of the great building. The walls were made to echo and re-echo with the old College yell given by the students. No man

had ever received such a greeting by the Kansas State Agricultural College. It was truly spontaneous and hearty.

President Waters, in accepting the presidency, discussed the work and the aims of the Agricultural College in a lengthy and scholarly address that was well received by the audience. As it will be published in full in this paper, the reporter will not presume to make notes of its many excellent points.

President Waters considered that a formal occasion of this kind was one suitable for the conferring of honorary degrees, and upon his suggestion the faculty unanimously recommended that the honorary degree of Doctor of Laws be conferred upon Congressman Charles F. Scott, Dean Walter Williams, Chancellor Frank Strong, Pres. Joseph H. Hill, Supt. Edward T. Fairchild, Gov. Walter Roscoe Stubbs, and Secretary Foster Dwight Coburn. The Board of Regents confirmed this recommendation, and these gentlemen were presented by different members of the Board of Regents in brief congratulatory addresses, and the diplomas were formally presented by President Waters.

INAUGURAL RECEPTION

In the evening a public reception was held in Domestic Science and Art Hall, which about eight hundred people attended. The hall was tastefully and elaborately decorated, exceeding anything of the sort that had ever been seen at the College. There was a long receiving line, and the college orchestra furnished the music for the occasion. It had also relieved by music the weight of the preceding programs.

A rather large number of distinguished persons in addition to the speakers attended the inauguration exercises, and there can be no doubt that the entire program was an effective introduction of President Waters and set him firmly on his feet in the institution.

Coming from another state, and with little acquaintance with the work of this College, or with members of its faculty, the president was not hampered by traditions nor influenced by any petty jealousies, or enmities, existing among members of the faculty. The situation was such that never before had the personnel been placed so at scratch, with each being under the necessity of creating his own status with the president. As judicious a consideration of the result as this writer can make leads to the conclusion that President Waters was a good judge of men and of situations and prompt and masterful in dealing with them. He probably was not always right at first, but he could amend his views and change his course upon presentation of convincing considerations. Winning by compro-

mise, or by holding action in abeyance, was not unknown in his practice. A ready yielding in non-essentials accompanied immovable insistence on what in his judgment was vital in a situation.

THE PRESIDENT AT WORK

In taking up his duties President Waters naturally tended toward such modifications of existing conditions or procedures as would approach the pattern to which he was accustomed. University standards and methods thus appeared as the ideal. He found a Council of Deans that thus far had been used but little, and made its members his source of information and communication, and the immediate administrative agencies in the curricular work of students. He adopted the charter of powers assigned to the deans by President Nichols shortly before he left, and enlarged their responsibilities and functions. He did not give personal attention to the assignments of individual students excepting in respect to military work. As young men in all divisions of the College were subject to certain requirements in respect to military drill and instruction, consistent treatment of requests for relief from these requirements was attained through retention by the president of the authority to act in such cases.

Under rules in force, President Waters found that passing upon students' applications for advanced credit on account of work done elsewhere was in the hands of the department heads, respectively. Though no bad results had been noted here, previous experience elsewhere had shown the president that individual views of department heads frequently led to arbitrary and unfair action, which might be in the direction of leniency or, more likely, in that of undue stringency. He therefore announced in the catalogue that "students who have completed a four-year course in an accredited high school will receive advanced credit on the purely academic work of the freshman year at the discretion of the president of the College." Such credits might be based on either high-school or college work, as our admission requirements were substandard.

In 1912 admission was raised to completion of fifteen acceptable units in an accredited high school, and the next catalogue announced, "At the discretion of the president, students who present certificates showing credits for college work done in other institutions are allowed hour-for-hour credit on courses in this College in so far as they may be directly applied, or can be accepted as substitutions or electives."

Up to this time there had been few transfers of students from other colleges to this. The policy of the president gave assurance that there would be no sacrifice of the special character of our cur-

ricula, and at the same time no insistence upon identity of content in all cases, and that the president was personally the final authority.

Although the president held so tightly to this prerogative, he clothed the committee on advanced credit with absolute power to act in his place. The committee was thus placed between two blades of a pair of shears, the president and the department heads. By means of conferences and formal recommendations by the respective heads of departments, friction was reduced to a minimum, and little complaint was made by either students or faculty. In later years procedure developed into a practice that the committee passed on the validity of credits offered, and the several deans upon their application to the curriculum chosen by the student. The dean is supposed to be held in check by the rules concerning substitutions which the faculty adopted.

ADMISSION REQUIREMENTS

One of the first problems with which the new president grappled was the terms of admission to the College curricula. From the earliest years the policy of the College had been to maintain contact with the scholastic standing attainable in the better rural schools. The standard for graduation was the vital point, since the schooling needed to bridge any gap between such rural schools and the College curriculum proper might be supplied by a preparatory department, and its extent indicated by the naming of individual subjects or by formulation of groups of them into courses of study.

The admission requirements in 1908-09 were regarded as equivalent to five or six high-school units, though they were not stated in those terms. In the first catalogue issued by President Waters the requirements were announced as eight units, two full years of high-school work, as follows: two units of English, and two units of algebra and geometry which were required of all entrants. The other four units might be offered from six groups of subjects, viz., physical science, biological science, history, ancient languages, modern languages, and vocational subjects. A maximum of two units was acceptable from any one group.

Contact with the common schools was maintained by the organization of a two-year subfreshman curriculum. The work of subfreshman students was administered by Dean C. M. Brink, assistant to the president.

Raising the terms of admission made revision of the curricula necessary. This was carried out with the direct participation of President Waters. The length of the class periods was increased from fifty minutes to a full hour, of which, as previously, five minutes was used for changing from one class to the next. Coinci-

dent with this increase of two-ninths in the net time of the class period, the periods per week allowed to a "full study" were reduced from five to four in number. The net time per week for a full study not carrying laboratory work thus became 220 minutes instead of 225.

In the revision of the curricula much of the work that had been given in the freshman year, which was common to all, was relegated to the subfreshman years, and time was thus set free for courses that greatly strengthened the attainments of students before graduation. The subjects characterizing a given curriculum were thus advanced in time, and the several curricula became more or less distinct from the beginning. The freshman year instead of being of a generalized type, with subjects drawn from each of the special fields of the College, was somewhat specialized at once. This feature was deemed of great importance by the President, and the fact that a young man could begin studying agriculture the first day that he was on the campus was stressed in the advertising material.

THE NEW CATALOGUE

In the tabular presentation of the revised curricula in the catalogue for 1909-10, the ingenious plan employed for indicating the credit hours, and the clock hours for lectures or recitations and for laboratory work, respectively, was proposed by Dean McCormick, and it is now used throughout the catalogue, having been extended to the condensed descriptions of the individual subjects. The descriptive material concerning the educational objectives of the several curricula was carefully revised, and much of it has survived later campaigns of revision and condensation.

This catalogue embodied several other innovations. Previously the exposition of the work of departments was presented under an alphabetical arrangement of the names of the departments. In this the department expositions were grouped in accordance with their subject matter and curricular relations. These groups were designated as divisions, and were: agriculture, mechanic arts, home economics, and general science. In a general way these parts of the catalogue were in charge of the dean of agriculture, the dean of mechanic arts, the dean of women, and the dean of science, respectively.

The relationship of deans to department heads was very loose at that time, especially in the case of the general science departments. In agriculture, all the departments had developed from the original farm department except the department of veterinary medicine, and their community of interest made conference with

a dean in respect to problems of instruction and research rather easy and natural, especially as the director of the Agricultural Experiment Station was *ex officio* the dean of agriculture.

In the case of mechanic arts the situation was also relatively free from complications, as most of the departments recognized in that group in the catalogue had been created on the initiative of Dean McCormick. The departments of architecture and drawing, and of electrical engineering, were of longer standing, and some friction resulted especially in respect to the latter.

The dean of women administered the curriculum in home economics in which the two departments, domestic science and domestic art, were directly interested, and was also in charge of certain general matters involving the young women, including passing upon excuses from physical training, and coordination of her work was not difficult.

Most of the departments grouped in the catalogue under the heading "Division of General Science" had been completely autonomous for many years, and the dean of science, with whom the president conferred from time to time concerning them, was very slow to assume any administrative power in connection with them. Any authority assumed was by unequivocal direction of the president. As a result, clashing was very infrequent. At first the curriculum in general science was the only one administered by the dean of science. As this was open to both young men and young women, some special cooperation with the dean of women was involved.

COLLEGE DIVISIONS CREATED

The original rather loose responsibility of deans was gradually strengthened by the practice and direct requirement of President Waters, and January 29, 1912, additional action was taken by the Board of Regents.

On motion it was ordered that the Divisions of the College be as follows:

The Division of Agriculture with Ed. H. Webster, Dean;

The Division of General Science with J. T. Willard, Dean;

The Division of Mechanic Arts with E. B. McCormick, Dean;

The Division of Home Economics with Mrs. Mary Van Zile, Dean;

The College with C. M. Brink, Dean.

And it was ordered that the Professorships created since by the creation of the Deanships be assigned to their proper Divisions by the President.

October 30, 1912, the department of extension was given the status of a Division with John H. Miller as dean. In 1912-13 the names of the deans were printed under the titles of the divisions of the catalogue, and in a list of administrative officers. With the death of Dean Brink, June 29, 1916, the deanship of "The College" having served its purpose, was permitted to lapse.

Among other new features of the College catalogue for 1909-10 was the introduction of an educational biography in connection with the name of each member of the teaching force. These were continued throughout this administration and furnish valuable and presumably authentic information concerning the personnel of that period. The great increase in the size of the catalogue led to a reduction of these in the issue for 1917-18, to data concerning degrees held and date of appointment.

The new catalogue was printed on a standard size page of softer paper than that previously used and not suitable for carrying illustrations. Type of a larger size was used, and the descriptions of curricula and courses were completely revised and to a considerable extent rewritten.

About twelve pages were given to a history of the College which is especially valuable as affording a view of the status of the College in several respects at that time. Unfortunately it adopted from previously published material quite erroneous statements concerning the educational connection between Bluemont Central College and the Agricultural College. The former never gave any college instruction, and the latter could not have adopted a non-existent curriculum or faculty.

The directory of the graduates of the College was omitted on account of objection made by the State printer, but a much more highly comprehensive index was included. The total number of pages became 335 instead of 238, and made a rather impressive volume, much to the satisfaction of the president.



J. H. MILLER

Farmers' Institutes, 1905-1911. Director of college extension, 1911-12. Dean, Division of College Extension, 1912-1915.

ADMISSION REQUIREMENTS RAISED TO STANDARD

As graduates of the College to an increasing extent entered other educational institutions as candidates for advanced degrees, difficulty in respect to credits and standing became more annoying. Admission to membership in certain organizations of college graduates was also denied, and membership of the College in athletic conferences was not granted. In these and other ways the low terms of admission to the College worked a hardship upon both graduates and undergraduates.

Manhattan was unable to maintain a four-year high school, and in fact was not eager to do so, since the local young people could enter the College on completion of two years in the city high school by suitable choice of subjects.

President Waters supported by influential members of the faculty renewed efforts to get the Board of Regents to raise to standard the admission requirements. These efforts became successful October 30, 1912, but the end was not accomplished without a long struggle, tactful representation, and adoption of a compromise plan.

The continuous practice of maintaining at the institution instruction in such subjects, above those taught in the common schools, as would enable the student to pass through them to the College curricula and to graduation was still advocated. Even common-school subjects were taught in the earlier decades. Improvement in the rural schools had taken place, but some forceful and loyal members of the Board of Regents believed that conditions were still such that many worthy young people would be prevented from attending the College if the terms of admission were raised to fifteen units of high-school work, graduation being presumed as a rule. Adequate accessibility of high schools to the country population was not conceded.

Furthermore, some did not believe that such extended high-school preparation was necessary to prepare students to enter upon work in agriculture or home economics that should be regarded as of college grade. They were not so insistent in respect to engineering. This attitude was a survival of the old Anderson view that the purpose of the College should be the making of practical farmers, mechanics, and homemakers. The most damning insinuation that enemies or opponents could make was to ask, "How many of your graduates are farming?"

THE SCHOOL OF AGRICULTURE

Consent to adoption of standard terms of admission was finally obtained by an agreement to the coincident establishment of an organization of about high-school grade, though somewhat higher

in its academic accomplishment per year. This was designated as the School of Agriculture, and adaptation to the supposed needs of country boys is reflected in the name, although the school also provided for work in mechanic arts and home economics. A three-year curriculum in each of the three lines was provided.

The Board was especially insistent that the curricula in the School of Agriculture should be formulated with no reference to the College curricula. They were to be complete in themselves and designed to appeal to young people who did not plan to take college work. The announcement as printed in the catalogue was in part as follows:

The School of Agriculture is organized to meet the needs of young men and young women of Kansas who may need instruction more closely identified with the life of the farm, home, and shop than that provided by the high schools of the State. It is also intended to meet the needs of those men and women who find themselves for any cause unable to complete an extensive course of collegiate instruction, yet who feel the necessity of a practical training for their activities in life. More than one-half of the student's time in the school will be spent in the laboratories and in contact with the real objects of his future work. An element of culture and general information is provided for in three years of English for each course, and in work in history, economics, citizenship, physics, and chemistry.

The School of Agriculture is not a school preparatory to the College. Its sole purpose is to fit men and women for life in the open country, and to make country life more attractive; to make the workshop more efficient; in short, to dignify and to improve industrial life. It is not established to entice students away from the high school. It is for those of every walk in life who wish a larger view and greater skill in doing the world's work. All the resources of the College are at the disposal of the School of Agriculture. Its students have every advantage possessed by students in the College.

Twenty-four pages were given to the announcement which included a detailed presentation of the three curricula, and description of the courses embodied in each. This was placed in the catalogue before the corresponding information concerning the college work proper from 1913 to 1918. After that it was transferred toward the end of the catalogue to remove a liability to mistaking this for the college work.

Still further to prevent misapprehension concerning the nature of the organization and more accurately to indicate its purpose, the name was changed in 1922 to the Vocational School.

The School of Agriculture was placed in charge of two of the best members of the faculty, Prof. Harry L. Kent being made principal and Miss Ada Rice assistant principal. Its work was centered in the building then recently vacated by agricultural departments and now (1939) known as Education Hall. The industrial, laboratory, and science courses were given in the departments which handled the college work in similar lines. The entire faculty cooperated in good faith to make a success of the enterprise. The school opened September 15, 1913, with an enrollment much beyond expectation, more than 600.

The enrollment of 658 the first year was followed by a steady decline to 422 in 1916-17. The entrance of the United States into the World War in 1917 cut the attendance down nearly one half, from which no recovery was made until 1920-21, when it reached 280. The next year the enrollment was 297, but after that it fell off rapidly to 47 in 1924-25.

On account of lack of demand for it, the home economics course was withdrawn in 1922, and the other courses and the school were announced for the last time in the catalogue for 1922-23. Instruction was maintained to 1925 for the benefit of those already enrolled.

The administrative faculty of the school changed somewhat during the course of its existence. Prof. Harry L. Kent was transferred from the directorship of study by correspondence to become the first principal September 1, 1913, and served to May 15, 1920, when he became superintendent of the Ft. Hays Branch Experiment Station. He was succeeded by Allan P. Davidson, who had been associate principal since November 15, 1919, and by whom the school was conducted to June, 1924, when it was discontinued as a separate organization.

Miss Ada Rice was assistant principal from September 1, 1913, to June 30, 1918, and James W. Zahnley, February 1 to June 30, 1918. Mr. Zahnley was acting principal for the year 1918-19, during which period Professor Kent in the absence of Dean Holton was acting head of the department of education and acting dean of the summer school.

Although the School of Agriculture was advertised in good faith as not a preparatory school for the College, its principal function was to serve as such. The majority of the students enrolled did not register as students in one of the regular courses, but as special students, and took subjects that would make up deficiencies

in their preparation for admission to the College. Some of those who were graduated also applied their work toward the admission requirements. The College evaluated the three years in the school at thirteen and one-half high school units.

The school undoubtedly served a useful purpose, and some of its graduates attained prominence either with or without additional formal education. Perhaps they would have found other channels for their preparatory work had the school not existed. Those who did not enter College had the benefit of first-class vocational training through from one-half year to three years. The school under the two names was continued for twelve years.

CURRICULA STRENGTHENED TO FOLLOW STANDARD PREPARATION

The adoption of full high school preparation for admission to the College made complete revisions of the curricula necessary in 1913. These were carefully carried out by committees of the divisional faculties, then passed upon by the general faculty, and finally by the Board of Regents. The new State Board of Administration, which came into control of the scope of instruction in March, gave its approval to all the curricula excepting that in printing which, with the formal recommendation of the faculty, it abolished. Instruction in the art of printing was still retained.

In this revision of the curricula those in the field of agriculture were consolidated in one with opportunity for choice of groups of electives in agronomy, animal husbandry, dairy husbandry, forestry, horticulture, milling industry, and poultry husbandry.

ORGANIZED PROCEDURE

The smoothness of the running of an educational institution, and the quality and effectiveness of its output of alumni, depend to no small extent on the adaptation of its organized procedures to the accomplishment of their purposes. These are often stigmatized by the ignorant, impatient, or unthinking as red tape. There may be times when red tape must be cut, but such occurrences are evidences of imperfection in organization rather than proof that organization is not only inconvenient, but a deleterious burden.

The essential features of organized procedure in the College, and the many subsidiary arrangements to promote comfort, accuracy, and conformity to requirements are the product of the action and interaction of many minds. They have changed with the growth of the institution in numbers and complexity and reflect the ability of administrative officers to meet conditions as they develop or are created. This executive work while of the highest

importance is that least known, understood, or appreciated by the general public, and even by a large fraction of the College group of faculty and students.

NEW COLLEGE CALENDAR

One of the most fundamental of the elements of college organization is the calendar, the general annual program of routine events. During most of the first fifty-four years of the College the instruction year was divided into three terms, the time of beginning and ending of each of which had varied somewhat. From 1874 to 1879 a two-term arrangement was used in which the year began in August and ended in May, and the terms were separated by the winter holidays. The terms were thus about seventeen and twenty weeks in length, respectively. This proved to be unsatisfactory, and the three-term arrangement was resumed.

One of the supposed great advantages of the three-term plan was that it made it possible for young men to attend winter terms and complete some definite work without interfering much with employment in farm operations. That was, however, a talking point more than anything else, as farm work began two to six weeks before the close of the winter term, depending on the season and the latitude. It was found advisable to reduce the winter short courses to ten weeks on this account.

At best it was not practicable to make the three terms equal in length, and as the attendance increased and the practice of offering nearly all freshman or sophomore subjects every term obtained, the inconvenience of these inequalities became quite important.

Other considerations were also involved in the situation, and after due consideration, the Board of Administration on recommendation of President Waters adopted the semester system, and the general provisions of a calendar adapted to this change. This calendar had been worked out by Deans Potter and Willard as a committee of the Council of Deans, and had been adopted by the council and the faculty. It became effective 1917-18, and in its essential features it is still in use because it meets conditions.

The advantage of adopting the semester system may be briefly summarized. It brought the College into harmony with nearly all other colleges and thus facilitated transfers of credits either to or from them. It reduced by one-third the work of assignment of students, and of preparing and reporting final grades and recording them by the registrar. The preparation and printing of schedules and assignment cards, and certain clerical work in the offices of deans, was also reduced to the same extent. Economies resulted in other minor ways.

The new calendar reduced the winter vacation to an even two weeks so that the regular succession of lectures, recitations, and laboratory exercises was not deranged. As the midyear came well after New Year's Day, it was arranged to begin the College year on the second Monday of September, which was somewhat earlier than had been the practice, and this with the shortened holiday season made it possible to close the year at an earlier date. This arrangement brought the institution into close harmony with other colleges and the high schools, and enabled high-school teachers to come here to attend the summer school without loss of time, and our faculty members to attend the summer sessions of eastern universities without the necessity of late enrollment.

REWRITING CURRICULA ON SEMESTER PLAN

The adoption of the semester system made it necessary to rewrite the curricula entirely. This was no small matter. The daily load of the student could not be greatly altered, and the subjects required in a given curriculum had been chosen and assigned such fractions of the whole as were believed necessary to a properly balanced and effective preparation for some definite field of activity. Of course passing from a twelve week to an eighteen week period for presentation of a subject could not always be exactly accomplished by a simple change of hours per week, and some recasting of the material offered became necessary.

The three-hour courses very naturally were allowed two hours a week with perfect equivalence. Those "full studies," which had been reduced from five to four periods a week when the net periods were lengthened from forty-five minutes to fifty-five, now received reduction to three periods a week, which gave them more than a ten percent gain of class time.

The three-hour basis for studies has a great advantage over the four-hour in respect to utilization of classrooms. A Monday, Wednesday, and Friday class alternating with one given Tuesday, Thursday, and Saturday fills the week completely. It not being desirable to have classes Saturday afternoons, for afternoon recitations a two-hour course Tuesday and Thursday fits with a three-hour course Monday, Wednesday, and Friday.

MAKING SCHEDULES AND ASSIGNING STUDENTS

The making of a program or schedule of classes began to be very formidable by the close of the Nichols administration. President Nichols attended to this himself and was able to handle it readily as it gradually increased in complexity. With the beginning

of the Waters administration this work was given to a small committee, but practically one person must work out a schedule. The labor involved and the superiority of mind required for this in an institution such as this is wholly unrealized by the average member of the faculty.

The College was very fortunate in having Prof. R. J. Barnett to make the schedule from 1909 to 1911. When he resigned to go to the State College of Washington, Prof. A. E. White, also of the department of mathematics, took up the work, and has continued it to the present date (1939). To his knowledge, patience, and genius the College owes a debt which may be acknowledged but cannot be paid. An idea of the magnitude and difficulty of this duty may be obtained by considering that in 1939 nearly 1,600 different classes were scheduled each semester. These were to give the work of 26 distinct curricula offered by five divisions of the College with a total of 43 departments and 368 teachers. These classes had to be placed in classrooms and laboratories grossly inadequate to the meeting of these classes with any convenience. The entire schedule is really a synthesis of 154 schedules for as many classifications of students or subdivisions of them.

Closely connected with the scheduling of classes is the assignment of students to such work from term to term as will advance them regularly in the completion of the requirements of their curricula, respectively. Persons acquainted only with the necessities of a college of liberal arts in which but a small fraction of the work of a student is definitely fixed have no conception of the difference between it and a technical school in which the greater part of a curriculum is definitely specified and must be included in his program by the student, and in which many of the subjects must be studied in a definite order.

During the earlier years of this administration, the making of assignments was in the hands of the respective deans, whose corps of assigners worked with no closely organized connection with each other, and no current check-up on their work. The assignments were adequately supervised by the deans, but scattered as they were it was not practicable to know exactly how assignments were running with reference to any individual lecture, recitation, or laboratory group. Naturally each student tried to get his classes to suit his individual convenience regardless of the plan made for him by the committee on schedule. The result was that classes in subjects common to two or more curricula or which were handled in several divisions for any reason were likely to be very unequally distributed, and the assigning period was followed by several days of reassignments that were necessary to the balancing of classes.

This did not please the students who had to change classes, and the entire situation was bad in respect to starting the term's work.

In the hope of correcting this situation President Waters appointed a committee on assignment to operate in a measure independently of the deans. The chairman of the committee was the College registrar, Miss Jessie McDowell Machir, and from that time to this, some of the ablest men and women have been members of it. Its methods of operation have been modified from time to time. The deans by appointment of assigners, and by suitable provisions governing their action, have retained complete control of all assignments made, and of decisions concerning departures from normal assignments which students may desire.

The committee on assignment plans and executes the routine by which a student is admitted, registered, pays his fees, and obtains his assignment from an assigner responsible to the dean. Assignments are checked for conflicts, and class cards written and assorted by departments. The function which it performs, the prevention of overcrowding of classes, can be done only by a centralized operation. A description of the procedure used in the several features of the work of this committee would be out of place here. Suffice to say that through experience and intelligence, a system has been developed which works with marvelous efficiency, even if at the expense of high nervous tension on the part of some.

Of course there are objectors. Some assigners think that they were not hired to do that, although it is some of the most difficult, important, and responsible work that a member of the faculty can do. Students who have to wait a few minutes to get their assignments are irritated and do not realize that there would be waiting for most of them under any other system. Some say that the crowd should be separated and each Division of the College conduct its own work. This cannot be done unless to each Division are allotted certain classes in the subjects common to all or several curricula, into which only its own students may be placed. This would necessarily increase the total number of classes, and thus the load on faculty, schedule, and classrooms. This arrangement would also materially increase the labor of collecting fees and the liability to the occurrence of errors. The voluble critics of the present general plan know very little about the complex relations of the factors involved, and base their opinions on their own personal inconvenience. One often has to stand in line at a cafeteria or a movie theatre.

GRADING THE WORK OF STUDENTS

One of the changes made in handling the academic work of the institution during this administration pertained to the grading

system. This is always a topic of controversy. Everyone recognizes that accurate grading of a student's work is impossible, and attempts at an approximation vary from that of a conscientious teacher who sets a numerical value upon every product of the student that comes to him, and combines these into a weighted mean, to the one who has very little regard for justice to and among students, and is content to mark them "passed" and "not passed," basing action on his general impressions.

Previous to 1910 grades were reported on the percentage system, in the use of which the lowest passing grade had been 70 for many years. This provided 31 steps in the estimates of quality in passing. In 1910 on recommendation of a committee, the faculty replaced this by a letter system in which E signified excellent; G, good; P, passed; that is, only three steps were provided for the differentiation of quality in work that was passing. If it be alleged that a teacher cannot distinguish between the work of a student whom he has graded 86 and one whom he has graded 87, it may be replied that neither can he distinguish between a low E student and a high G student, and that an error in classification here is at least ten times as large as in the other case.

This committee which recommended the letter system of grading also recommended a system of honors for five percent of the seniors and five percent of the juniors. In arriving at the five percent to be honored, it being impossible to get the mean value of a string of letters, the committee submitted a plan for conversion of the letter grades into numbers for use in calculating the relative standing of the students. Having thrown away one numerical system, it was immediately necessary to devise another that was cruder in its operation.

Some changes have been made in the grading system since 1910. As long as the award of honors depends on grades, and as long as eligibility to certain positions depends upon grades, or upon graduation from a College, so long it will be the duty of a teacher to prevent cheating in his classes, and to estimate as carefully as possible the relative scholastic excellence of his students.

PHI KAPPA PHI

The stimulus of possible membership in an honorary scholarship society is one which influences many in the upper ranks of ability. While this may be overestimated, most teachers believe that the prize of such membership is one for which contention is worthy. A group of members of the faculty who were interested in the honor society of Phi Kappa Phi took the necessary steps and got this College approved for a chapter which was installed November 15, 1915.

The charter members of Phi Kappa Phi in Kansas State College included all heads of departments, and any others who had doctor's degrees. As its organization was for the promotion of scholarship, it was felt that the initial membership should be distributed where the influence of members would be most effective upon students. Later elections included prominent alumni and additional members of the faculty. The chief activity has been the consideration and election of students to be members. Ten percent of the seniors in any division of the College may be elected each year.

GAMMA SIGMA DELTA

Though of more restricted scope than Phi Kappa Phi, mention may be made of the organization of a chapter of Gamma Sigma Delta June 15, 1914. This is a national honor society which recognizes scholarship in agricultural science and education, and excellence in the practice of agricultural pursuits.

OMICRON NU

It should also be noted that a chapter of Omicron Nu was established May 31, 1915. This society recognizes scholarship, research, and leadership in home economics.

SHORT COURSES

In attempting to meet the needs of various groups who might be regarded as properly looking to the College for instruction, certain short courses had been previously established, viz., a two-term course in domestic science and art given during the fall and winter terms; a summer course in domestic science and art given in two ten-week terms successive years; a farmers' short course, and a dairy course, each given in two ten-week terms successive winters. The introduction of a regular summer session of the College and the adoption of the semester calendar caused some changes in these courses, and others were provided.

In 1917 the short course in domestic science and art, then known as the Housekeepers' Course, was changed from two terms to one semester in length, in adaptation to the change in the College calendar. A year later it was reduced to fifteen weeks in order to complete it before the Christmas holidays. This course had come to be known popularly as the "diamond ring" course. The enrollment in it was 175 in 1912-13, and in 1917 was still 92, but the demand for it decreased rapidly, and it was discontinued in 1926. This change in demand reflected the introduction of home economics in the high schools, and the growing influence of the vocational educational program in the State.

A one-year course in lunchroom management was offered beginning in 1916 to give training to mature women who were fitted by education and ability to carry on some form of commercial establishment for providing meals to the public. Although it was offered for some years, not much demand for it was manifested.

At the close of this administration the following-named were being offered: Farmers' Short Course, two eight-week terms in successive years; Creamery Short Course, eight weeks; Housekeepers' Course in Home Economics, one semester; Course in Lunchroom Management, two semesters; Short Course in Traction Engines, eight weeks; Short Course in Shop Work, eight weeks; and Short Course in Road Building, eight weeks.

CHANGES IN PERSONNEL

When President Waters took charge of the College, he found the heads of the departments performing their work in a competent manner for the most part and assisted by suitable subordinate officers. The general conditions in respect to harmonious and efficient work here were of such a character that no immediate faculty changes were deemed necessary. As opportunities developed through resignations or expansions of the work of the institution, he attempted to improve the quality of the personnel.

The initiative in obtaining subordinate members of the faculty was taken by the heads of departments. Data concerning several of the most promising persons available were submitted to the president, and a choice made in conference. The president took the initiative in most cases in respect to heads of departments. However, after the first year, recommendations in respect to department heads and other members of the faculty were presented to the president through the deans. The president was insistent upon obtaining as good persons as the available salaries would attract. He said, "We must be careful not to get loaded up with mediocre men—too good to fire and too poor to keep."

It will be impossible in this sketch to record all faculty appointments, and in most cases the underlying considerations cannot be stated. This writer is not acquainted with these matters in all cases, and appointments or changes noted will be for the most part limited to action which had a distinct bearing upon the growth or development of the institution.

The fact that President Waters throughout his life was in close contact with agriculture and its manifold problems naturally made him especially vigilant in respect to appointments to agricultural professorships, and to the development of the agricultural work of the institution. Those interested in other divisions of the College

sometimes thought that the president was negligent of them in comparison with his solicitude for the agricultural departments. He was keenly aware of the difficulty of obtaining first-class men in agriculture, and perhaps did not fully appreciate the difficulties attending finding similarly high-class personnel for other fields of the College.

In the course of this administration many persons were employed for the first time. Some who came to the College within this period attained their chief distinction later. In most cases in the brief notices which are possible the chief points in the connection of these persons with the College are mentioned even though they belong to a later administration. Usually advancement to the rank of professor is used as the dividing consideration, and persons of lower rank employed during this administration may find mention later.

AGRICULTURAL DEPARTMENTS

AGRONOMY

William M. Jardine was elected professor of agronomy to succeed Professor TenEyck and began service July 1, 1910. He was a graduate of the Utah Agricultural College and had had a wide experience in meeting the agricultural problems of the West. For three years he had been assistant cerealist of the United States Department of Agriculture. On account of the resignation and leave of absence of Director Webster, he was made director of the Agricultural Experiment Station and dean of the Division of Agriculture, effective December 30, 1912. His success in these capacities was such that he was made president of the College, March 1, 1918, and his work in that capacity is treated in a later chapter.

ANIMAL HUSBANDRY

Roland J. Kinzer, who came to the College as an assistant in animal husbandry, September 1, 1903, and became professor of animal husbandry in 1905, attained a wide reputation and resigned effective January 1, 1911, to become secretary of the Hereford Breeders' Association. As a suitable successor was not immediately available, President Waters himself became temporarily acting professor of animal husbandry, and served in that capacity until June 30, 1912. July 4, 1912, Wilber Andrew Cochel became professor of animal husbandry and head of the department. Professor Cochel was a graduate of the University of Missouri and had been a student under Dean Waters, who thus had become well acquainted with his sterling qualifications for this position. He served with distinction in this capacity until June 30, 1918. He is now editor of the *Weekly Kansas City Star*.

Previous to this administration the practice had been to have but one full professor in a department, who by virtue of that rank was head of the department. Promotion to a professorship was contingent upon the filling of a vacant position, or the division of a department. This situation was met in part by the appointment of associate professors, who were given full responsibility for defi-



NORTHEAST CORNER OF THE CAMPUS, 1921

View about 1921 of buildings in and near the northeast corner of the main campus. In the foreground are the slaughter house and the nutrition barn. To the rear are the sheep barn, poultry husbandry residence and barns for use in feeding experiments. This corner is now occupied by Van Zile Hall and adjacent grounds.

nite phases of the work of the departments, respectively. The continued growth of the staffs of some of the departments, and the undesirability of their indefinite subdivision, and the desire to obtain high class men, led to the appointment of one or two more to the rank of professor in a department.

For the department of animal husbandry, Edward N. Wentworth was employed as professor of animal breeding, and introduced in that department consideration of modern principles of genetics. He remained until the outbreak of the World War when he enlisted for service and was given leave of absence from May 11, 1917. At the close of the war he accepted employment with Armour and Company and is director of the livestock bureau. The impress of his high ability and engaging personality remained with the College for years.

DAIRY HUSBANDRY

Prof. John C. Kendall resigned his position as head of the department of dairy husbandry in 1910 and was succeeded on Sep-

tember 20, 1910, by Ollie Ezekiel Reed, who was placed in charge with the rank of assistant professor of dairy husbandry. He was a graduate of the University of Missouri, and President Waters highly appreciated his good qualities. He was advanced to a full professorship the next year and remained until September 1, 1918. He has held responsible positions elsewhere ever since.

HORTICULTURE AND FORESTRY

M. F. Ahearn was advanced in rank from time to time in the department of horticulture, and in 1915 became professor of landscape gardening in that department.

In harmony with the provisions of a state law enacted in 1909, Charles A. Scott, professor of forestry at Iowa State College, was made Kansas state forester and professor of forestry in this institution, effective June 1, 1910. He had had wide experience in practical forest service and remained in this position until September 1, 1917, when he resigned, and established the Kansas Evergreen Nurseries as a commercial enterprise.

MILLING INDUSTRY

The importance of the milling and baking quality of wheat of various varieties, and the product of diverse conditions and climates had been recognized for many years. The department of chemistry had conducted milling and baking tests since 1906. These were in charge of Prof. C. O. Swanson. In 1910 it was decided to establish a separate department of milling industry. This was placed in charge of Leslie A. Fitz, a man of fine ability and varied experience, who in 1912 was made professor of milling industry. He was on leave of absence from August 1, 1922, to July 31, 1923, when he resigned to take what seemed to be a better position, and was succeeded by Prof. C. O. Swanson, who conducted the department with great ability.

POULTRY HUSBANDRY

From the early days of the College a fluctuating interest in poultry husbandry was exhibited, and for many years fowls were handled as an adjunct to the chief work of another department. The original "farm department" gradually became specialized as the agronomy, animal husbandry, and dairy husbandry departments. The poultry work at one time was in the department of animal husbandry, and later, in the department of dairy husbandry. A foreman, superintendent, student assistant, or regular assistant had immediate charge of the poultry. One of these was Allen G. Philips, who later attained distinction in this field. He began service August 1, 1908.

This secondary attention to poultry ceased with the appointment of Wm. A. Lippincott to be professor of poultry husbandry, effective January 1, 1912. Professor Lippincott was a man of broad education and experience. His caliber is indicated by the fact that he was made chairman of the Graduate Council in 1920. He remained with the College until 1923, when he was drawn away by the college of agriculture of the University of California, where he spent the remainder of a useful life which came to a most untimely termination. From the appointment of Professor Lippincott, and the simultaneous creation of an independent department of poultry husbandry, progress in that field has been uninterrupted.

VETERINARY MEDICINE

In the department of veterinary medicine, then in the Division of Agriculture, in addition to Dr. F. S. Schoenleber, professor, and head of the department, Dr. L. W. Goss was promoted to be professor of pathology from December 1, 1913, and effective the same date, Dr. R. R. Dykstra was advanced to the professorship of surgery.

Dr. J. H. Burt, first employed in 1909 as an assistant in veterinary medicine, was promoted from time to time and in 1916 became associate professor. Since 1919 he has been professor of anatomy and physiology and head of the department, and is one of the pillars of the Division of Veterinary Medicine.

AGRICULTURAL EXPERIMENT STATION

The Agricultural Experiment Station quite naturally received much attention from President Waters. An appropriation made in 1909, the winter before he came, enabled the Board to purchase 320 acres of excellent land. This, with previous acquisitions, was divided among the several departments as follows: agronomy, 280 acres; animal husbandry, 184; botany, 7; dairy husbandry, 40; entomology, 3; horticulture, 107. This distribution remained practically unchanged during this administration. An appropriation providing for the purchase of about 368 acres more was made by the legislature of 1917, and this was selected and bought in the spring of 1918, after the resignation of Doctor Waters.

The increased area of land available permitted great expansion of the experimental work with crops, and the adoption of plans requiring relatively long periods of time for their execution. Rotation plans were started then that are still running, and will be continued for many years.

Probably the most valuable contribution made to experimentation by President Waters himself was his compelling of coopera-

tive work among the departments. His experiments in the growth and nutrition of animals at the Missouri station had been carried on with the chemistry department in vital collaboration, and he gave his controlling influence to similar recognition of chemistry and other sciences here. The view that to gain the support of practical farmers experimentation must be kept on the level of their experience and knowledge received little support from him. At the same time he believed that it was possible to make the results of scientific research understandable by intelligent farmers even though they were untrained in the sciences.

Though details cannot be presented here, there can be no question that a more scientific attitude was injected into the agricultural departments, and the clamor for results that were financially profitable immediately was considerably reduced. Of course President Waters appreciated the immediately practical and welcomed it as an accompaniment of the more slowly developing, and more permanently valuable, features of prolonged cooperative research.

FORT HAYS BRANCH EXPERIMENT STATION

In June, 1909, the resignation of C. K. McClelland, superintendent of the Fort Hays branch experiment station, was accepted, effective December 31, 1909. A suitable successor was not readily found, and the station was in charge of the assistant superintendent, George K. Helder. Prof. A. M. TenEyck, head of the department of agronomy, had had much practical experience, and the subject of farm management was his specialty. All things considered, it seemed to be wise to transfer him to the superintendency of the branch station. At the same time he was made professor of farm management that he might be available at the College for lectures on that subject. He took charge of the station July 1, 1910, and retained this position until December 31, 1912.

In anticipation of the withdrawal of Professor TenEyck, the Board elected H. M. Bainer to be superintendent, but he did not accept. George K. Helder became superintendent, and served in that capacity until March 15, 1916, when he was succeeded by Charles R. Weeks, who resigned May 1, 1920.

ENGINEERING DEPARTMENTS

While the chief interest of President Waters was in agriculture, he was not indifferent to the importance of engineering, and realized especially its connection with farming through the various aspects of agricultural engineering, such as farm machinery, drainage, and irrigation.

The responsibility of deans was very hazy in 1909, and exten-

sion of their power was resisted to a greater or less extent by forceful heads of departments. Definite organization of Divisions did not take place until January, 1912.

NEW DEPARTMENTS

Dean E. B. McCormick was professor of mechanical engineering. Associated departments were architecture and drawing, civil engineering, electrical engineering, and printing. In March, 1910, at the instance of Dean McCormick, the Board voted to divide the



ENGINEERING HALL

The east section of this building (right) was erected in 1909 and the central and west sections in 1921. This building houses in part the departments of the Division of Engineering and Architecture.

department of mechanical engineering into four departments, some of which were recognized as subject to subdivision as engineering work developed in the College. As described in the catalogue for 1909-10, these were: (1) applied mechanics and hydraulics, (2) mechanical drawing and machine design, (3) power and experimental engineering, (4) shop methods and practice, and (5) steam and gas engineering. The first two were administered by one head, Prof. R. A. Seaton; the third was under Professor McCormick; the fourth under Asst. Prof. G. E. Bray, and the fifth under Prof. A. A. Potter.

The alignment of departments in the field of engineering underwent little further fundamental change during this administration. Printing was consolidated with industrial journalism, July 1, 1915. Farm machinery was established, April, 1915, and all work in that domain transferred from the department of agronomy. Power and

experimental engineering became heat and power, a service department, its courses of instruction being placed in other subject-matter departments.

ARCHITECTURE AND DRAWING

The department of architecture and drawing under the fostering administration of Prof. J. D. Walters had maintained a useful place, and progressive growth in the College since 1877. Varying somewhat in name from time to time, it was always the medium for expression of the ideas of Professor Walters, and the value of his industry and activity can hardly be overestimated. His willingness to give time and attention to special students in architecture determined the development of the department from that of one giving routine instruction in elementary drawing to one with a creditable standing in the field of architecture.

In 1915 William A. Etherton was brought to the department as professor of rural architecture for the purpose of giving added impetus to the work of the College in the interest of improvement of the conditions of country life. He remained two years. This work in 1917 was, to a certain extent, transferred to a new department, farm engineering, later designated as agricultural engineering, where it was incorporated with courses in other phases of rural engineering. This department was headed by Prof. Karl J. T. Ekblaw, who remained to June 30, 1919.

With the creation of this department Prof. Cecil F. Baker was made head of the department of architecture and began service September 1, 1917. He developed the professional work with enthusiasm, ability, and success, and remained until August 31, 1923, when he was led away by what he regarded as a more attractive field of work in the University of Cincinnati.

October 1, 1917, Dr. John D. Walters was made professor of architecture, *emeritus*, and had this rank until his death September 30, 1929. This was a worthy recognition accorded a man who had given his time and talents without stint to an institution which he loved and which he served loyally to the best of his knowledge and ability. He did much which could not have been reasonably demanded of him. His running commentary on the local affairs of the College contributed to the *Industrialist* constitutes a unique verbal motion picture of the institution through the years from 1897 to 1910. In recognition of this service his name was carried as an editor long after his contributions ceased.

ELECTRICAL ENGINEERING

Under the capable direction of Prof. B. F. Eyer the department of electrical engineering grew in its attraction for students and

facilities for instruction. Companies organized to provide electricity to the public were becoming more general, and Professor Eyer had frequent calls from them for assistance in the solution of their problems in this formative period. January 1, 1913, he closed his connection with the College and since then has followed the profession of a consulting engineer in Kansas City, Missouri.

On the resignation of Professor Eyer, Prof. J. O. Hamilton, head of the department of physics, was placed in temporary charge of the department of electrical engineering, and continued to conduct it until September 1, 1914, when Prof. Clarence E. Reid became its head. Professor Reid fully maintained the prestige of this important department up to his untimely death, February 28, 1927.

SHOP PRACTICE

W. W. Carlson advanced consistently from foreman of the machine shop in 1910, and superintendent of the shops, 1912, to



WOODSHOP

This view shows the woodshop with significant additions built across each end and projecting towards the front. Other parts were built to the rear.

be professor of shop practice and superintendent of shops in 1917. Since then his efficient and progressive management has contributed much to the College.

THE ENGINEERING EXPERIMENT STATION

In the reorganization of the engineering activities of the College, Dean McCormick realized the importance of coordinated effort under centralized stimulus, and projected the Engineering Experiment Station. With the acquiescence of the president he sub-

mitted his plan to the Board. It was discussed at length and adopted March 24, 1910, on a motion by Regent Capper, as follows:

(1) That the Board of Regents authorize the establishment of an Engineering Experiment Station in accordance with the plans submitted by Dean E. B. McCormick.

(2) That the staff be composed of the heads of the departments of the engineering department, including the heads of the new departments created by the order of the Board at this meeting.

(3) It was ordered that the Dean of the Engineering Department be designated as Director of the Experiment Station.

This Station has never had the support of national subsidies such as those given to agricultural experimental work, but has filled an important place in the College, and the total result attained through its operation has been very significant, and doubtless much greater than would have been the total of separate activity by the several departments. Up to 1939 it had issued 37 bulletins which presented a large total volume of engineering material of immediate practical value to the people of the state.

DEANS McCORMICK AND POTTER

Dean McCormick resigned his position, effective August 15, 1913, and became mechanical engineer and director of the test laboratories in the office of public roads in the United States Department of Agriculture. It is difficult to evaluate the service of Dean McCormick, but it was of a very high order. His general plan for the expansion and accompanying reorganization of the engineering work of the College has remained as a permanent feature of the College. Two of the men selected by him and promoted to be heads of departments have become successively deans of the Division, viz., Professors Potter and Seaton. Dean McCormick knew good work, did



A. A. POTTER

Mechanical engineering, 1905-1910; steam and gas engineering, 1910-1920. Dean, Division of Mechanic Arts, 1913-1918. Dean, Division of Engineering, 1918-1920. Director of Engineering Experiment Station, 1913-1920.

good work, and selected good men. He was also a valuable man in general matters affecting college administration.

Upon the resignation of Dean McCormick, Professor Potter, head of the department of steam and gas engineering, was made acting dean of the Division of Engineering, September 18, 1913. His intelligence, energy, technical preparation, and limitless industry earned him the appointment of dean, effective May 2, 1914, and determined the outstanding success of his later executive work. He continued his service with the College until August 31, 1920, when he became dean of the engineering schools and director of the engineering experiment station in Purdue University, where he has amply demonstrated his executive ability.

Dean Potter initiated the practice of assembling from each teacher, personnel data concerning students. A standard blank was adopted and used for a time throughout the institution. The disturbance of routine by certain conditions, chiefly lack of time, caused by the World War, disrupted the general plan, but the Division of Engineering continued to make use of the fundamental ideas, and enlarged upon them in several respects. The data thus obtained are of great value in student counseling and in the placement of graduates.

GENERAL SCIENCE DEPARTMENTS

The departments giving the fundamental, scientific, general, and cultural work of the College, grouped in the Division of General Science, received careful consideration by President Waters. The succeeding paragraphs present the more important changes in them in respect to organization, scope, and growth, and the upper ranks of their personnel.

BACTERIOLOGY

Prof. Walter E. King resigned the professorship of bacteriology effective September 1, 1910, to assume an important place on the executive staff of Parke, Davis and Company. The Board expressed its profound regret.

Prof. Francis H. Slack succeeded Professor King, September 1, 1910, but resigned effective May 27, 1911, and Mr. Leland D. Bushnell was promoted to the rank of assistant professor and placed in charge of the department of bacteriology. In 1912 he was made head of the department and professor of bacteriology, and still performs the duties of this important situation. In the meantime he has made an enviable record of successful accomplishment in instruction and research.

BOTANY AND PLANT PATHOLOGY

Prof. H. F. Roberts remained at the head of the department of botany though absent on leave on account of ill health part of the year 1917-18. During this time, Asst. Prof. Leo E. Melchers was in charge, and he became professor of botany and plant pathology and head of the department, July 1, 1919, on the resignation of Professor Roberts. This was a deserved recognition of his ability and value to the College.

The connection of Wilmer E. Davis with the department began in September, 1909, with his appointment as assistant professor of botany. Since that time he has added successful research to his service as a teacher and is now (1939) a professor of plant physiology.

Dr. Edwin C. Miller was employed September 1, 1910, as instructor in botany, and thus entered upon a distinguished career as a teacher, investigator, and author. His fine reputation in plant physiology is world-wide in extent, and he is still (1939) in the department, as professor of plant physiology.

Henley H. Haymaker, now (1939) professor of plant pathology, was first employed as an instructor November 16, 1917, on account of the leave of absence of Professor Roberts. His record since then has been one of steady progress in value and rank.

CHEMISTRY

During the administration of President Waters, some men were added to the chemistry staff who are still there, 1939. J. S. Hughes was appointed an assistant in 1910, and by successive promotions has become professor of biochemistry. He is widely known for his investigations in animal nutrition, with special reference to vitamins. In 1913 Dr. H. W. Brubaker was elected an assistant, and is now professor of analytical chemistry. He has given valuable service to the Manhattan Water Department. Herbert H. King, C. O. Swanson, and P. J. Newman were brought over from the preceding administration, and continued their excellent service. Professor King succeeded Prof. J. T. Willard as head of the chemistry department, July 1, 1918.

When physical education for women was transferred from the old rebuilt chemistry building, the autumn of 1911, the building was assigned to the department of chemistry, which occupied it to 1939, the structure being known as Chemistry Annex No. 1.

ECONOMICS AND SOCIOLOGY

The interest of the president in fundamental things was manifested in the field of economics, and Mr. Theodore Macklin was

employed effective September 1, 1915, as instructor in rural economics. He remained into the next administration and did such good work that he was taken by the University of Wisconsin. His resignation was effective August 31, 1919.

The scope of the department of economics was enlarged in 1914 by the transfer of the courses in sociology to it from the department of education. The two fields have remained united since that time.

EDUCATION AND PSYCHOLOGY

Instruction in certain courses in education, especially the professional branches in which proficiency was required to qualify one to receive a state teacher's certificate, was given by Prof. Wm. A. McKeever, beginning in 1900. This was in the department of philosophy.

A department of education, definitely recognized as such, appeared first as a phase of the work in extension, and Edwin Lee Holton became professor of rural education in April, 1910. During the college year 1910-11, he also gave resident lectures on rural education. The catalogue for 1911-12 carried a section on a department of rural education and sociology, in which the six courses offered responded to "the urgent demand that public education in a democracy shall function in greater social and vocational efficiency."

In the catalogue for 1912-13, sociology is presented in a separate department with Professor Holton as its staff, and a department of rural and vocational education is also described, the staff consisting of Professors Holton, McKeever, and Van Zile. The department of philosophy under Professor McKeever was also still maintained, but all courses in education had been transferred to the new department.

October 1, 1913, Professor McKeever accepted a position in the University of Kansas to develop a department of child welfare, and the catalogue for 1913-14 included no mention of a department of philosophy. A department of education was indicated with Professor Holton as head, and Associate Professor Kent and Assistant Professor Reisner as additional members of the staff. There was also an exposition of the work of the department of sociology with a staff consisting of Professors Holton and Reisner. The next year sociology was attached to economics, where it has since remained.

The department of education was thus successfully launched on a career which has been signally useful and successful. Professor Holton has shown organizing ability, grasp of current conditions,

and the spirit and intelligence to meet them. In 1910 Professor Holton was appointed director of the summer school and has carried that work ever since. January 25, 1918, he was made dean of the summer session, and thus became a member of the Council of Deans.

From time to time Professor Holton has had leave of absence for study or for special work elsewhere. He gave notable service in France in the post-war educational program for the American Expeditionary Forces. His service to the College in the general field of education, not merely in his own department, merits high commendation. Through the office for placement of teachers, he has been of great service to Kansas State graduates and to the schools to which they have gone.

Succeeding Professor McKeever, in 1913, came Edward Hartman Reisner for a short but brilliant period of service. Beginning as assistant professor of education, he was advanced to be associate professor in 1914, and in 1916 was acting director of the summer school. He carried with distinction faculty duties outside the classroom, but resigned to take a place in the faculty of Columbia University where he has remained.

By accepting an assistant professorship in education, October 1, 1917, John Christian Peterson just got under the wire in respect to this administration. As his work belongs to later periods, comment will be deferred.

ENGLISH LANGUAGE AND LITERATURE

It is probable that in no field of instruction is the attainment of results that are of effective practical benefit to the individual student more difficult than in that of English language and literature. The raw material submitted to treatment is so excessively and diversely variable in quality and characteristics that special adaptation to the needs of each person is indicated as essential to the highest success.

President Waters sought to improve conditions in the department of English by the addition of a man notable in the line of instruction in the use of language. To this end James William Searson, a very successful teacher, was elected associate professor of English, effective September 1, 1910. In 1911 the department of English language and literature was divided, and he became professor of the English language, Doctor Brink remaining professor of English literature and head of the corresponding department.

Doctor Brink conducted the department of English literature with dignity and cultivated taste, and students with literary aspi-

rations found in him a sympathetic and valuable counselor. However, his health failed gradually, and he was made professor of English literature, *emeritus*, and his department was combined with the department of English language. Before this action took effect, Doctor Brink died, June 29, 1916.

Professor Searson fully met expectations in his work. He fostered interest in debate, oral English, and composition adapted to the needs of specific occupations and industries. He may have carried nominal special adaptations to an extreme. He was absent on leave from March 25, 1916, to March 25, 1917, on the request of the Kansas State Textbook Commission, so that he might complete a series of readers for use in the public schools.

Professor Searson shortly afterward was given leave of absence for the year 1917-18 for the purpose of study, but from the spring of 1918, he was in the Government service, and engaged in publicity in support of the World War. His leave was extended for 1918-19. He was managing editor of *National School Service*.

In 1919 Professor Searson resumed his work at the College, but resigned June 1, 1921, to become professor of English in the University of Nebraska. He was a man of great personal charm, a ready and thoughtful public speaker, and a popular teacher. He gave this institution some of his best years.

Nelson Antrim Crawford came to the College as an assistant in English, September 1, 1910. He advanced rapidly, becoming instructor in 1912 and assistant professor in 1913. On the resignation of Harlan D. Smith, April 1, 1914, he was placed in charge of industrial journalism. From July 1, 1915, he was professor of industrial journalism, and superintendent of printing. The departments were united, and he became professor of industrial journalism and printing, and held the position until June 30, 1926. He was, however, on leave of absence from May 1, 1925. He left to be director of information in the United States Department of Agriculture for Secretary Jardine.

Professor Crawford has extraordinary discrimination in the use of words and the greatest accuracy in grammar. Through these qualifications he exerted a valuable influence upon the material appearing in the *Industrialist* and in the College catalogue. Since leaving, he has had a distinguished career as an author and editor.

Hallam Walker Davis began his work in the College as instructor in English, September 1, 1913, and by well-earned promotions became professor of English, September 1, 1918. He was made head of the department of English, July 1, 1921. Since 1914 he has written the column of "Sunflowers" which appears in the *Industrialist* and elsewhere to the delight of thousands. Those who

do not enjoy them may be advised that those who do not know how to take Hal Davis had better not. He has administered the department of English with sanity and breadth as to its place and purpose, and sympathy and good judgment as to its personnel.

The increased interest in work in English language and literature, accompanied by the introduction of elective courses, was recognized in the appointment of Dr. John Robertson Macarthur to be associate professor of English from September, 1914. March 25, 1916, he was made professor of English, and he was acting head of the department during the time that Professor Searson was on leave of absence. Doctor Macarthur was a man of rare talent, culture, and charm, and his influence extended far beyond the department. He resigned in 1920 to take an attractive position in the California Institute of Technology, where, with increasing responsibilities ably met, he has since remained.

Robert Warren Conover came as assistant professor of English in 1915. September 1, 1918, he became associate professor, and in 1920 professor of English. He has continued his diligent, even, and valuable service up to the present time. For many years his special charge has been the annual series of lectures presented by members of the department staff.

HISTORY AND GOVERNMENT

The department of history and government made steady growth under the wise guidance of Professor Price. Raymond Garfield Taylor was employed as instructor in history and civics in 1910. He was an able and enthusiastic teacher, and the College suffered a real loss in his death, October 14, 1918. At that time he had attained the rank of associate professor.

Ivor Victor Iles was employed in 1911 as an instructor in history and civics. He took rank at once as one eminently qualified in the field of government, and for nearly thirty years has elevated the standards of accomplishment of students. By successive promotions in rank he became professor of history and civics, July 1, 1920. He has given important service in several capacities outside the department, and since 1934 has had editorial supervision of the College catalogue.

Elden Valorius James came as an instructor, September 1, 1912, and by reason of earnest and successful teaching was made assistant professor in 1915, associate professor in 1919, and professor in 1924, and still contributes to the strength of the department.

INDUSTRIAL JOURNALISM AND PRINTING

President Waters was fully alive to the value of legitimate pub-

licity, and believed it to be possible to make more effective use of the *Industrialist*. To this end he established the department of industrial journalism and brought in Mr. Charles James Dillon as its head, with the rank of professor. Professor Dillon had had extensive experience in newspaper work serving several important journals. For eleven years immediately preceding, he had been on the staff of the *Kansas City Star*. He was a sparkling writer, and entered various fields in his comments and contributions.

Professor Dillon began his work with the College, September 1, 1910. In connection with the curriculum in printing, some instruction in reportorial work had been given previously, but under Professor Dillon practice in the several fields of newspaper writing was systematized. The *Industrialist* was changed in form from the magazine page to the newspaper style, October 22, 1910, and at the same time was greatly modified in respect to the character of its contents. It became essentially, primarily, an agricultural paper with attention also to matters of household interest, and, of course, exploited College events or opinions in these fields. Diminished attention was given to local incidents of the campus, but news of the alumni continued as a strong feature. The paper served as a laboratory for student practice in writing as well as in printing. The column "Sunflowers" first appeared in the issue for October 22, and was supposed to be distinctively the product of Professor Dillon, though he wrote much editorial and feature material, also.

Professor Dillon had an important part in the formulation of the curriculum in industrial journalism which was offered in September, 1911, and continued his connection with the College until August 1, 1913, when he resigned to become managing editor of the five Capper farm papers with offices in Topeka.

Mr. Harlan D. Smith, who had had the advantage of instruction under Professor Dillon, was made assistant in industrial journalism in 1911, and was advanced to the rank of instructor in 1913. On the resignation of Professor Dillon, he was placed in charge of the department, and so remained until April 1, 1914, when ill health compelled him to resign, and the department was given into the care of Nelson A. Crawford, who was an assistant professor of English, and had had considerable experience in newspaper work.

MILITARY SCIENCE AND TACTICS

The military department was one of the beneficiaries of Nichols Gymnasium and was moved into it from its forbidding quarters in the "old barn," or "armory," the fall of 1911. Not much change took place in the work of the department during the first years of this administration. Charles Henry Boice, who began service in

1907 with the rank of first lieutenant, was promoted during his tour, and left with the rank of captain in 1911.

Captain Boice was succeeded July 1, 1911, by Lieut. Robert P. Harbold, who served into the fall of 1912, when he was recalled to his regiment. February 15, 1913, Lieut. Roy A. Hill became commandant.

Lieutenant Hill was a young man of great energy, ability, and personal acceptability, and at once took steps to make the military work more interesting and instructive to the men by the introduction of several special field features. The result was that after the spring inspection in 1914, the war department gave the College a rating of "distinguished institution," an honor accorded only to the ten colleges having the most outstanding departments of military science and tactics. This rating made it possible for a student on graduating to obtain a commission as second lieutenant in the regular army without examination. The College maintained this standing for three years.

The detail of Lieutenant Hill expired in November, 1915, and he was succeeded by Capt. Laurance O. Mathews, who remained to June 5, 1917. The United States had entered the World War, and Captain Mathews was ordered to his regiment.

From June 16 to October 27, 1917, Prof. W. B. Wendt, of the department of applied mechanics, served as acting head of the military department. He was relieved by Capt. Wm. P. J. O'Neill (retired), who remained to the next administration.

MODERN LANGUAGES

The department of German expanded into one of modern languages in 1916, when French was added to the courses offered. Louis Henry Limper had been employed since February 1, 1914, in addition to Prof. J. V. Cortelyou, who continued as head of the department. Instruction in Spanish was introduced in 1917, and Miss Grace R. Hesse was employed as assistant in modern languages.

MUSIC

Instruction in music has been a feature of the College throughout its history. At first the remuneration of the teacher of music consisted only in the fees collected. Later a salary also was given in consideration of general service rendered in connection with public exercises. Then came a period when it was a point to advertise that all instruction in the College was entirely free, and fees were not charged even for music lessons. Under this condition instruction was given in classes as much as possible, and was limited to

students in regular curricula, there being no special music students, and no curricula leading to a degree in music.

The gratuitous feature of instruction in music contributed to the enrollment of many students for the work, but it can hardly be asserted that it was conducive to the production of excellence in individual artistry. The most satisfactory features which President Waters found when he came were those in which groups were the natural units for rendition. Prof. Olaf Valley was very successful in glee club and chorus work, and oratorios and light operas were produced. Prof. R. H. Brown was exceptionally successful in enlisting the cooperation of young persons in orchestra and band, and commendation similar to that which he won is still awarded for the work which he is now giving in the Manhattan schools.

In 1915 Professor Valley was replaced by Arthur E. Westbrook, a teacher of very high quality who reorganized the work of the department of music upon the usual lines. He remained into the next administration and through unstinted labor and high ability laid a solid foundation for his successors. In 1921 he left, and became director of the conservatory of music of Illinois Wesleyan University at Bloomington, Illinois. The department offered a three-year curriculum in applied music in 1916, and added a two-year curriculum in public school music in 1918.

PHYSICAL EDUCATION AND ATHLETICS

The completion of Nichols Gymnasium made possible the inauguration of an inclusive and definite program of physical education, including athletics as an important feature. President Waters had a warm interest in all phases of this work for both young men and young women. Physical training had been required for young women since 1899, and beginning in 1901 had been conducted in the rebuilt chemical laboratory. It was transferred to the new building in the fall term of 1911.

A new era for physical education and athletics in the College was recognized by the employment of a general department head and the systematization of training for both young men and young women. Prof. Guy S. Lowman became director of this work, September 1, 1911. Professor Lowman was especially interested in physical education as distinguished from athletics, but was also responsible for the coaching of athletic teams.

In the spring of 1912 the Board approved comprehensive recommendations of the faculty concerning physical education and military training. Young women who had had one year of physical training were allowed to take music, instead, the second year, as had been the practice since 1904.

Young men were given a choice the second year between military drill and physical training. This option was removed in 1913, but students due to take military drill might postpone it in order to hold membership in athletic teams. In 1914 a provision was adopted which permitted a man who was a regular member of one of the College athletic teams to transfer from military drill to physical education for the season of the sport. He could participate in not more than two sports.

Beginning with the first semester 1918-19 in the succeeding administration, physical education two hours weekly was required of all men in the freshman year. May 31, 1919, the Council of Deans voted that all men students who entered in 1918, and those enrolling later, should take two years of physical education. The Council also voted to require two years of physical education for all women students, without the privilege of substituting music or any other subject for it.

Although physical education for young women is under the general direction of the head of the department, practically, the woman in direct charge of it has almost complete responsibility. Changes in this position were frequent during this period.

Miss Marguerite E. Barbour, who began her connection with the College in 1904, and had given excellent service, resigned effective September 1, 1910, and was succeeded by Miss Blanche E. Enyart. Miss Enyart filled the position for three years and then resigned. Two years later, September 1, 1915, she was reappointed with the rank of assistant professor, but closed her connection finally September 1, 1916, her leaving being regretted by all.

During the interval in Miss Enyart's two periods of service, the work for young women was headed by Miss Eunice G. Sellner and Miss Garnet L. Hutto, 1913-14, and Miss Margaret L. Burns, 1914-15. Following Miss Enyart in 1916-17 was Miss Annie R. Cahoon, and in 1917 to 1919, Miss Ethel M. Loring.

The Athletic Association formed by the students had been maintained for many years in connection with faculty management by two members of the faculty appointed to serve on its board of directors. February 1, 1911, the Board of Regents established an athletic committee of the College "to consist of three members of the faculty to be appointed by the president of the Board and two students to be appointed by the Athletic Association, the five to constitute the athletic committee of the College and be responsible for the athletic policy, rules of eligibility, to schedule games, and act on all matters pertaining to the athletics of the institution." President Waters, Dean McCormick, and Prof. J. O. Hamilton were

appointed members of this committee by W. E. Blackburn, president of the Board of Regents.

The Board of Regents, June 11, 1912, took action concerning the athletic board. "On motion of Mr. Palmer it was ordered that the athletic board be composed as follows: President of the College; three members of the faculty to be appointed by the president, one of which shall be the director of athletics; three students to be appointed by the Rooters' Club of the College. The president appointed Dean McCormick and Professor Hamilton as the other two faculty members." This plan for the athletic board was undoubtedly proposed by President Waters.

October 2, 1913, "on recommendation of the president, the rules of the Board with respect to the constitution of the athletic board were amended so that the three upper classes each elect a representative instead of the Rooters' Club, electing three." Instructor Harry E. Porter was appointed a faculty member of the athletic board vice Dean McCormick, resigned.

In June, 1916, on account of inharmonious conditions in respect to athletics, the athletic board resigned so that a new board might be appointed to assist in recommending a director of athletics and the coaches. The new appointees were Dean W. M. Jardine and Profs. H. H. King, R. A. Seaton, and George A. Dean. These appointments were effective June 14, 1916.

The adoption of standard requirements for admission to the College removed the last obstacle to an enlargement and strengthening of the athletics program of the College by obtaining membership in the Missouri Valley Athletic Conference. This was accomplished December 7, 1912, effective September 1, 1913, and inaugurated for the College the modern period of intercollegiate competition in athletics. The College is at some disadvantage in this field, but its teams have been winners to a sufficient extent to maintain the interest of students and the general public. For some years the College had been a member of the Kansas Intercollegiate Athletic Association, and continued to be for a time after admission to the Missouri Valley Conference.

Prominence in athletic connections carried with it the controversies that seem to be inevitable, involving coaches of intercollegiate sports. These cannot be entered upon here, but it may be noted that Mr. C. J. Merner was elected instructor in physical education in 1913, and Mr. John R. Bender was made head coach and director of intercollegiate athletics, effective August 1, 1915, and that conditions developed that caused the resignation of all the men in the department, effective August 31, 1916.

September 1, 1916, Prof. Zora G. Clevenger became professor

of physical education and director of athletics. At the same time Adolph G. Schulz was made assistant professor of athletics and assistant coach, and Emery A. Bauer, assistant professor of physical education. All these remained into the next administration.

For many years college teams had been permitted to use the city square bounded by Vattier and Ninth streets and Juliette and Bluemont avenues, but in January, 1908, the Board appointed a committee to report on an athletic field at the next meeting. Progress was rather slow. There was considerable sentiment in favor of the purchase of additional land for this purpose, but the committee reported in June, 1909, that the area in the southwest corner of the campus was sufficient for a quarter mile track, and March 24, 1910, the Board voted:

That the field originally selected in the southwest corner of the campus be established as the athletic field, the field to begin 100 or 150 feet west of the Domestic Science building and extend westward to the limit of the campus, and to be five or six hundred feet wide, so as to provide for the necessary football and baseball fields, tennis courts, track, etc. It was further ordered that the president of the College, the manager of athletics, and the professor of horticulture, be requested to make a survey of the field, lay out a detailed plan of the track, fields, courts, etc., locate and plan the fences, and submit the same for the consideration of the Board at its June meeting.

Improvement of the field was made, and games were transferred to it in 1911. A notable event proposed and specially fostered by President Waters was a field day for the purpose of making extensive changes in the topography. All the students and the faculty united in this enterprise. An elaborate organization in charge of members of the engineering faculty was worked out, and a really large amount of work was done. The date was December 7, 1916, and the *Industrialist* for December 6 and 13 gave full accounts of the plans and results. Royal Purple, Volume IX, also contains a good account of a day which did much to create student and faculty unity. Nothing else equal to it has ever been put on at the College.

ZOOLOGY, ENTOMOLOGY, AND GEOLOGY

The catalogue for 1908-09 gives an exposition of the work offered in entomology, zoology, and geology as that of one department. Its head, Dr. Thomas J. Headlee, was designated as professor of entomology from 1907 to 1909, professor of entomology and geology in 1909-10; and professor of entomology and zoology from

1910 to 1912. Doctor Headlee conducted this compound department ably, and subordinate members of the staff had special spheres of activity. The department met a permanent change when Doctor Headlee resigned to become professor of entomology in Rutgers University, state entomologist of New Jersey, and entomologist of



J. E. ACKERT

Zoology, 1913——. Dean, Division of Graduate Study, 1931——.

the New Jersey Experiment Station. Upon his leaving, October 1, 1912, George A. Dean was placed in charge of entomology and Robert K. Nabours of zoology and geology. While this was nominally a temporary arrangement to continue only until a suitable successor to Doctor Headlee could be found, it was soon apparent that none was needed, and the permanent division of the department was assumed, and Messrs. Dean and Nabours were made full professors, effective September 1, 1913, and the new arrangement recognized in the catalogue for 1912-13. This organization continues to the present time, and its twenty-fifth anniversary was celebrated in October, 1937.

One of the last acts of Doctor Headlee was to recommend the appointment of Dr. Mary T. Harman to be instructor in zoology from September 1, 1912. She at once demonstrated her worth, and became an assistant professor in 1914, associate professor in 1918, and professor July 1, 1921. Happily, she is still (1939) performing the duties of a teacher, engaging in significant research, and taking a part in the higher extra-curricular activities of students.

Among the able men who began service within this administration, and still remain, is Dr. James E. Ackert, who was appointed assistant professor of zoology and parasitologist in the Experiment Station. He became associate professor in 1916 and professor in 1918. President Jardine made him chairman of the graduate council in 1923, and with creation of the Division of Graduate Study, November 1, 1931, it was only a just and logical recognition when he was made dean of the Division at that time. Doctor Ackert's career has been colorful, but space is not available here for an ac-

count of his continuous research, special services, and success as an executive. Much of this belongs to later administrations.

James W. McColloch was another able man who was added to the force of the department of entomology as an assistant in entomology and an assistant in the Experiment Station in 1912. His high merit, especially in research, led to advancement in rank from time to time, and he was made a full professor of entomology in 1925. His death November 11, 1929, was a severe loss to the College.

HOME ECONOMICS DEPARTMENTS

President Waters had a sincere interest in the adequate and even liberal education of women for their inescapable places in the home, the schools, and society. He was more concerned with the home-making majority, than with the minority entering business and professional life not definitely connected with home life.

Mrs. Mary Pierce Van Zile continued as dean of women and head of the department of domestic science, and had some responsibility continuously for all the work in home economics, and for the general welfare of the women students. When the College was formally organized in definite divisions in 1912, she was made dean of the Division of Home Economics, and continued to carry her duties as dean of women, and head of the department of domestic science.

The work offered in home economics remained organized much as previously, but was enlarged considerably in scope by the introduction of additional courses. In 1915 a significant and progressive change was made in the separation from the department of architecture of the work in drawing, color, and design given to the young women in home economics. A new department was organized and designated as home art. In 1919 the name was changed to applied art, and in 1930 to art. The department was in the Division of Home Economics, its courses thus being transferred from the Division of Engineering. It was placed in charge of Miss Araminta Holman, who had been in the department of architecture and drawing since 1913.

Prof. Antonetta Becker, the talented head of the department of domestic art, resigned June 30, 1912, and was succeeded by Mrs. Bessie W. Birdsall, September 1, 1912. Professor Birdsall rendered excellent service until her resignation May 31, 1920.

With the growth in the number of students and courses, the duties of Dean Van Zile became so heavy that the department of domestic science was placed in charge of Assoc. Prof. Ula M. Dow, September, 1913. Miss Dow had been on the staff for some years and was returning from a leave of absence for study. As a student,

teacher, and executive, Miss Dow demonstrated ability of a high order. She resigned at the end of the year 1913-14 to become professor of food and dietetics in Simmons College. September 1, 1914, Miss Margaret H. Haggart, an able woman with varied experience, became head of the department of domestic science and served into the next administration.

The serving of lunches and dinners by classes in cooking began in 1877, and with various modifications in practice was continued with little or no break. Experience was thus given to the students, and some income was realized from laboratory products. The establishment of the short course in domestic science in 1899 increased the available material. When Calvin Hall was planned, definite provision was made for preparation of meals in individual kitchens, and for serving them to regular patrons.

During the summer session, 1915, Professor Haggart operated cafeteria service in the basement of Calvin Hall. In July provision was made for a fully equipped cafeteria on the first floor of Kedzie Hall. This was opened in October under the management of Miss Nola Treat. The cafeteria is maintained primarily as an organization for giving instruction in institutional management. In 1918-19 a beginning was made in a house for practice in home management. Professor Haggart resigned June 30, 1919.

Many young women were employed in the home economics departments who did not remain long enough to advance beyond the rank of assistant or instructor. A large fraction of these charming and efficient individuals left the College to enter homes of their own, which now are centers of wholesome and progressive influence in Manhattan or elsewhere.

ADDITIONAL PERSONNEL

Many talented young men and women who began careers under this administration, and whose selection was thus stamped with the approval of President Waters, cannot be more than named here. The following list includes most of those, not mentioned elsewhere, who have remained with the College to the present time, or nearly so, or who, after serving some years, went to responsible positions elsewhere: R. K. Bonnett, Leila Dunton, A. L. Hallsted, F. C. Harris, W. P. Hayes, C. W. Hobbs, A. G. Hogan, O. W. Hunter, A. M. Paterson, Elsie H. Smith, M. C. Tanquary, R. W. Titus, C. A. A. Utt, Paul S. Welch, and F. A. Wirt.

COLLEGE EXTENSION

The activities of the Division of College Extension were very rapidly developed during this period, and have continued since with

accelerated velocity. The limits of space in this volume, and of time available to the author, prevent any adequate treatment of its work and service. Some of the high points will be shown briefly as opportunity occurs. It is noteworthy that almost all the fields of extension work were entered upon to a greater or less extent by the end of the Waters administration.

The old-time farmers' institutes, seldom providing for more than annual meetings, were replaced by organizations made up of persons who had paid membership fees and operated under a constitution and bylaws, and held three to six meetings a year for discussion of farm and home topics. The College assisted in suggesting subjects for discussion, and planned for statewide study of one or two special topics each year. At an annual meeting College speakers were supplied and an outline of the program provided.

The name of the annual meeting of farmers and farm women held at the College since 1906 was changed in 1915 from "State Farmers' Institute" to "Farm and Home Week."

In addition to other good appropriations obtained by President Nichols from the legislature of 1909 was one of \$25,000 for farmers' and State institutes for 1909-10, and another of \$27,000 for 1910-11. The appropriations had been only \$4,500 and \$6,000 for 1907-08 and 1908-09, respectively. During that time the institute personnel consisted of Superintendent Miller, an assistant, and one or two stenographers. The greatly increased appropriations available beginning July 1, 1909, when President Waters took office, enabled the Board of Regents to authorize "the employment of seven assistants for the following lines of work: farm management, two; dairying, one; horticulture, one; highway engineering, one; home economics, one; rural education, one."

The reports of Superintendent Miller for the three fiscal years, 1909-10, 1910-11, and 1911-12, were made in considerable detail, and reflect the enormous increase of extension work during that period. This cannot be even fairly summarized here. Some idea of the scope of the work as shown in the eighteenth biennial report of the College, 1910-12, may be obtained by naming the chief lines of activity. These were: farmers' institutes, of which 642 were held within the biennium; seven agricultural trains, which were operated over four railway systems; and hundreds of addresses at picnics and fairs, and before commercial clubs, women's clubs, granges, and teachers' associations, and in grammar schools and high schools. An enormous amount of public work was done in the field of highway, bridge, drainage, and irrigation engineering. The number on the force for this work increased from one in 1909 to four in 1912. Other phases of work included home eco-

nomics clubs, neighborhood improvement clubs, stock improvement clubs, movable schools, advocacy of vocational education, assistance of farmers and horticulturists by individual visits, and a beginning in the conducting of study by correspondence.

It will not be possible in this history to depict the rise and progress of all phases of extension work. Clear vision of some of these would require exposition at considerable length. That the magnitude of the work was fully realized by the Board of Administration is shown by its action October 29, 1912, in advancing the department of extension to the status of a Division, administered by a dean, and coordinate with the Divisions of the College occupied with resident instruction and research.

Coordination of the work on the campus and out in the State was sought by a provision "that extension teachers in agronomy, animal husbandry, dairying, and horticulture should have their desks in the departments of the College in which they are working." It was thought that the association of the extension teachers with the others would promote discussion, and insure arrival at agreement, and thus, consistency in the opinions expressed by the two classes of teachers.

In June, 1912, the Board of Regents adopted resolutions which favored placing a competent adviser in each county of the State, and tendering the assistance of the College, and providing "that the administration of county adviser work be placed in the extension department."

FARM BUREAUS

The first farm bureau in Kansas which also appointed a county agent, was organized in Leavenworth County, August 1, 1912. Similar organizations were made in Montgomery and Cowley counties soon after. These received no financial support from the College. By the summer of 1917 there were 18, and by October, 1918, 43 farm bureaus. These were of great assistance to the Government in carrying out its agricultural program as related to the war.

This rapid growth of the farm bureau movement was due in part to the passage by the Kansas legislature of "An act providing for state and county appropriations for the support of county farm bureaus," which was approved March 12, 1915. This law was amended materially in an act approved March 22, 1919. This act provided:

That whenever there shall be organized in any county in the State of Kansas a county farm bureau having a membership of 25 percent of the *bona fide* farmers of the county, or as many as 250 farmers, and having for its purpose the

giving of instruction in agriculture and home economics to the people of said county through practical demonstrations and otherwise, and the employment of a county agricultural agent or agents to prosecute this work, the Kansas State Agricultural College shall contribute, from Federal and State funds granted for demonstrations in agriculture and home economics, not less than \$1,200, as far as such funds are available, towards the salary of such county agricultural agent, or agents. All applications for such funds must be made by farm bureaus to the Extension Division of the Kansas State Agricultural College, on or before June 1 and December 1 of each year.

The legal requirements in respect to farm bureaus were somewhat revised by the legislature of 1939.

HOME ECONOMICS

Work with rural women has always been a strong feature of the College farmers' institutes and extension programs. By 1918 for its regular work in home economics the Division of Extension employed a state director and ten assistants. These were occupied with a great variety of lines of work. In 1917 and 1918 the program was reorganized with special reference to home life as influenced by the war.

November 1, 1917, a department of emergency home demonstration agents was organized. Miss Frances L. Brown was transferred from the directorship of the regular force to the leadership of the new department. Miss Stella Mather was assistant state emergency home demonstration leader, and there were 20 other agents who worked in as many cities or counties. The salaries of members of this department were met almost entirely by Federal funds, but local expenses were met by the units benefited.

Home economics clubs for girls began to be organized in the winter of 1910-11 and within a year more than 175 had been formed. Contests in agricultural projects of various kinds were promoted, and this led to the formation of clubs. By 1915 the department was "promoting boys' and girls' club work as a definite and practical line of extension service in agriculture and home economics." In 1915 there were 206 clubs in the state with a registered membership of 3,004 boys and girls. By 1917, 14,000 boys and girls were enrolled in 720 clubs. This development of boys' and girls' clubs was effected under the management of Otis E. Hall. Mr. Hall was employed in cooperation with the United States Department of Agriculture from 1914 to April 15, 1920, and gave most acceptable service.

CORRESPONDENCE STUDY

The department of college extension was authorized by the Board of Regents to give instruction by correspondence in the various subjects related to farm life, January 14, 1910. Nineteen such courses were listed in the next catalogue. In 1911 Harry L. Kent was employed to give instruction by correspondence, and July, 1912, became director of all this work. The number of courses offered increased to 29 in 1912.

The college faculty passed upon any proposal to offer a course by correspondence, and this led the Board of Regents to order that the director of extension should be a member of the faculty. This action was taken June 11, 1912. Director Miller should have been a member of the faculty long before, but at first his place in the College was almost secretarial only, and the gradual growth of his responsibilities had not before presented a situation making the desirability of faculty membership so obvious.

John C. Werner began service as head of the department of correspondence study September 25, 1913, and was succeeded September 1, 1915, by M. G. Burton. E. M. Tiffany served as assistant in this department from August, 1914, to February 24, 1917. W. L. French succeeded him July 15, 1917, and served until April 1, 1918. May 11, 1918, George A. Gemmell was appointed specialist in agriculture in the home-study service with the rank of instructor, effective August 1, 1918, to fill the position made vacant by the resignation of Mr. French.

At the close of this administration, study by correspondence had been extensively developed in free reading courses and in carefully formulated curricula of vocational courses in the several fields of agriculture, mechanical industries, and home economics. A beginning had been made in the provision of courses giving high school or college credit. Fees were charged for vocational or credit courses.

In the department of correspondence study Director M. G. Burton resigned effective June 30, 1918, and was succeeded October 1 by Asst. Prof. Vivan L. Strickland, who had been in the department from September 1, 1917, as specialist in subjects in the field of education. In October, 1921, an arrangement was made whereby Professor Strickland gave half his time to resident instruction in connection with the department of education. This was designated as temporary, but, effective February 1, 1922, George A. Gemmell was made acting head, and July 1, 1922, became head of the department of home-study service. Doctor Gemmell has continued in this position to the present (1939), and has conducted his de-

partment with dignity, ability, and courtesy. He has also been notably serviceable in extra-departmental capacities.

The importance and the dignity of instruction by correspondence were recognized by the Council of Deans, December 10, 1919, when, on recommendation of Dean Umberger, it was voted that teachers in that service be given rank and title in the same manner as members of the faculty giving resident instruction, and be included in faculty meetings of the departments and Divisions which they represent. The heads of subject matter departments had concurrent jurisdiction with the dean of the Division of College Extension in assignments of rank and title and promotions therein. The same practice had been applied to specialists in other departments of the Division of College Extension in a few instances, and has since come into use in all.

FEDERAL AND STATE COOPERATION

Congress passed "An act to provide for cooperative agricultural extension work between the agricultural colleges in the several states receiving the benefits of an Act of Congress approved July 2, 1862, and of the acts supplementary thereto, and the United States Department of Agriculture," which was approved May 8, 1914. Its provisions were accepted by the legislature of Kansas, March 1, 1915. It is known as the Smith-Lever Act.

The act is the first one of any general application in which the principle of matching Federal funds by State funds is embodied. It also provides for detailed Federal supervision of the expenditure of all the funds and approval of the purposes to which they are applied. It is thus an important step in centralization of power.

The act made permanent provision for the appropriation of \$10,000 to each of the states accepting its provisions, and of a share in additional amounts increasing up to \$4,100,000 in 1923. The additional amount for any year is apportioned among the states "in the proportion which the rural population of each state bears to the total rural population of all the states, as determined by the next preceding federal census." This sum was not available unless the State and its counties and municipalities or other units appropriated an equal amount. The State of Kansas met this provision, and the Board of Regents also continued to allot to the Division of Extension, money from the general maintenance funds of the College.

For the fiscal year 1917-18 there was thus available for extension work from the Federal Government, \$10,000 requiring no offset, and \$38,816 to be matched by the State; from the State there was \$38,816 to match Federal funds, and \$30,000 through

the general appropriation to the College. These funds made a total of \$117,632 for that year.

The act definitely provided that Smith-Lever funds are to be used for "the giving of instruction and practical demonstration in agriculture and home economics to persons not attending as residents in said colleges," and that "this work shall be carried on in such manner as may be mutually agreed upon by the secretary of agriculture and the state agricultural college or colleges receiving the benefits of this act."

This field of cooperation between Federal and State authorities was still further supported by later acts of Congress, and by State appropriations.

EXTENSION PERSONNEL

The personnel of the department, later Division, of College Extension was greatly enlarged during the Waters administration. This paralleled the expansion of extension work. When the extension department was given the status of a Division of the College, October 29, 1912, Supt. J. H. Miller received the title "dean of the Division of College Extension." He resigned this position August 31, 1915. His period of service was thus slightly under ten years, but during that time he registered most extraordinary activity, and secured support for development of the work from merely superintending and organizing farmers' institutes performed by himself, to a Division of the College comprising four departments, viz., farmers' institutes and demonstrations, highway engineering and irrigation, home economics, and correspondence study. These departments employed 27 persons, with clerical force in addition. The State of Kansas owes much to the vision, the unceasing industry, and the self sacrifice of Dean Miller. He left to conduct similar work in Arkansas, but met with disappointment, and returned to newspaper work in which he had had considerable experience before entering service with the College.

Edward Carl Johnson succeeded Dean Miller as dean of the Division of College Extension. He had been superintendent of farmers' institutes and demonstrations since 1912, and retained this work in connection with the deanship until July 1, 1917, when it was taken up by Andrew C. Hartenbower, who resigned November 15, 1919. From December 1, 1919, to August 31, 1922, this position was held by Thomas J. Talbert. Professor Johnson continued as dean until December 31, 1918, when he resigned to become dean of the agricultural college and director of the agricultural experiment station in the State College of Washington, where he continues in energetic and able service.

Walter S. Gearhart was chosen to be highway engineer in the extension department, July 1, 1909. In 1911 under the implications of a State law the holder of this position became State engineer. Numerous and diverse services were performed in this capacity



E. C. JOHNSON

Farmers' Institutes, 1912-1917. Dean, Division of College Extension, 1915-1918.

throughout the State. In 1914 Mr. Gearhart was made professor of highway engineering in the department of civil and highway engineering of which Prof. L. E. Conrad was the head. He served in this capacity and as State engineer until April 4, 1917.

In 1917 the legislature passed an act creating the State Highway Commission, in part in order to be able to cooperate with Federal authorities in highway development. The Commission had authority to appoint a chief engineer who should be State highway engineer, and Professor Gearhart was appointed to that position, and served until he enlisted in the engineering

corps of the United States Army, in which he held a captaincy.

In connection with the extension work of the institution, Edwin Lee Holton was appointed professor of rural education in April, 1910. His success in this field was such that he was transferred to resident work and was professor of rural education until 1913, when he was made professor of education. He still holds that position.

Harry J. C. Umberger was appointed supervisor of demonstrations in extension, February 1, 1915. He had served, 1911-12, in the department of agronomy, as assistant in cooperative experiments. In 1917 he became county agent leader, and continued in that capacity until December 31, 1919. Because of the resignation of Dean Johnson, he was made acting dean of the Division, January 1, 1919, and July 1 of the same year became dean. These promotions and his retention in that position to the present time, 1939, bear ample testimony to the ability and success with which he has administered an office which in difficulty and responsibility ranks scarcely second to the presidency of the College.

Frances L. Brown began work with the department of exten-

sion, July 1, 1909, as lecturer in domestic science. She was unusually effective in this work, and in 1914 was raised to the rank of director of home economics in extension. She became State leader of emergency home demonstration agents, November 1, 1917, and home demonstration leader in 1919, from which position she resigned February 15, 1921, to continue extension work in other states.

June 16, 1918, Mrs. Mary Whiting McFarlane succeeded Miss Brown in the position vacated November 1, 1917, and served until October 24, 1922, when she resigned on account of ill health.

An important addition to the extension staff was Harry B. Walker, who was appointed drainage and irrigation engineer in 1910, and made associate professor of irrigation and drainage engineering in extension in 1914. Beginning September 20, 1917, he was absent on leave to serve as a captain in the engineering corps of the army, and participated in action in France. February 15, 1921, he was promoted, and became professor of engineering in extension, in charge of drainage, irrigation, and rural engineering. July 1, 1921, he was made professor of agricultural engineering in the Division of Engineering. His talent attracted the University of California, and he resigned June 30, 1928.

Louis C. Williams began his very effective service in the Division of Extension July 1, 1915, as assistant to E. C. Johnson, superintendent of farmers' institutes and demonstrations. After working in several capacities, he was made assistant professor of horticulture in extension February 1, 1920, and associate professor July 1, 1921. He was advanced to the rank of professor July 1, 1926. Since 1924 he has been in charge of extension schools in agriculture and home economics, and of the extension specialists. Professor Williams has amply demonstrated his ability and versatility.

Alonzo F. Turner was appointed assistant county agent leader in 1917, becoming field agent in 1924. February 15, 1921, he was given the rank of associate professor in extension, and is still (1939) in active and able service.

Walter H. Burr was employed as assistant director of rural service, May 15, 1914, and became director July 1, 1915. He gave fine service in this capacity until January 1, 1921. At that date he became professor of sociology in the resident instruction, and remained in that position until 1929, when he left to accept an important position in the University of Missouri.

THE LIBRARY

The increase in the size and scope of the library led the president to the decision that adequate service demanded that a man

with more special training in the field of library management and the purchase of books and periodicals should be placed in charge. Accordingly, Mr. Arthur B. Smith was appointed, effective September 1, 1911. He had had prolonged and varied education, and experience in library work, and has since that date given able service to the College. Miss Gertrude A. Barnes, who had been assistant librarian, 1899-1908, and librarian, 1908-1911, was retained as assistant librarian, and continued to render conscientious and valuable service, and remained until 1913.

Miss Grace Emily Derby was employed as reference librarian, effective October 23, 1911, and her professional training and charming personality are still (1939) dominant in the library. September 1, 1913, she was made assistant librarian and received the rank of associate librarian July 1, 1918. The infirmity of increasing deafness suffered by Librarian Smith has made the administrative load of Miss Derby progressively heavier, and she has carried it with conspicuous success.

REGISTRAR AND BUSINESS MANAGER

The new Board in 1913 was not altogether satisfied with the organizational situation which it found in the offices of the secretary of the College, and the financial secretary or business manager. Miss Margaret Butterfield had in 1909 succeeded Miss Lorena E. Clemons as secretary and had given excellent service. John C. Christensen had been brought in by President Waters to have general charge of these offices and to develop a better system for making purchases and handling the financial records. Under somewhat adverse conditions he had achieved a notable success.

The Board separated the work that had been in the general or direct charge of Mr. Christensen and appointed James T. Lardner to be financial secretary. It also created the office of registrar and appointed Miss Jessie McDowell Machir to be registrar. In later developments Mr. Lardner became purchasing agent for all the educational institutions, and in January, 1916, the work was transferred to Topeka. He was a courteous and capable officer, and remained in the service of the State until August 1, 1919.

Miss Machir as registrar quickly won her way into the confidence of the administration, and in many ways official and extra-official has been a strong force for order, accuracy, and adequate standards. She has contributed much through her generous spirit and attractive personality to the individual development of students. In organized groups she has been especially helpful in the Cosmopolitan Club and the Young Women's Christian Association.

STUDENT HEALTH

The preservation of the health of students has always been a matter carefully considered by the faculty. A full presentation of this subject cannot be given here, but mention should be made of an important extension of college service in this field which was due to President Waters.

A proposal that each student pay with his other fees a sick benefit fee of fifty cents a term was submitted to an assembly of the students and endorsed. Authority to collect such a fee was given by the legislature in 1911, and the College catalogue for 1910-11 included a statement that "a hospital fee of fifty cents a term is also collected from each student, in return for which he receives medical treatment and hospital service in case of sickness." In June, 1912, formal action was taken by the Board to authorize the collection of that fee.

After somewhat unsatisfactory efforts had been made to use Manhattan physicians for this service, the Board, September 26, 1913, voted to employ a regular College physician for the students as recommended by a committee of the Faculty and approved by President Waters. The salary was to be from \$2,000 to \$2,250 per year, and the physician was to devote all his time to the service of the College, and to equip office and operating rooms. Provision was also made for a nurse at \$900 a year.

September 29, 1913, Miss Rose Thompson was appointed nurse, but did not begin service until January 21, 1914. Dr. Roscoe T. Nichols, of Liberal, Kan., was appointed College physician December 19, 1913, and assumed the duties of the position February 11, 1914. His salary was \$2,500 for eleven months' service. June 27, 1914, Dr. Marie A. Greene was appointed assistant physician, effective in September, and gave excellent service until August 31, 1917. On account of inadequacy of funds, the services of the nurse were discontinued after August 31, 1914.

The limits of the rights of students in respect to demands for medical attendance had not been fixed, and the physicians were kept excessively busy, often functioning as nurse as well as physician. Doctor Nichols resigned effective September 1, 1916, and Dr. Charles M. Siever, who was appointed his successor, entered upon his duties the next December. He headed this work until August 31, 1935.

The next catalogue, 1916-17, recorded more definite limitations upon the service which the College undertook to render in this field. The fee was raised to one dollar a semester for each student, and the statement was made that "in return for this he receives the services of the College physicians for any illness con-

tracted while in College. The fee does not include the cost of medicine, surgical operations, reduction of fractures, hospital fees, or the treatment of chronic conditions. As far as possible, and provided the students requesting such services room within the city limits, the College physicians visit in their rooms students who are too ill to go to the physicians' office." These provisions were unchanged for some years.

A College physician has a position very difficult to fill, and one in which it is still more difficult to please everybody. In ordinary life one's choice of his medical adviser is determined as much by the physician's personality as by his professional preparation. Even in the latter sphere it is almost impossible to arrive at a fair judgment. A student body is in no position to obtain information that would warrant condemnation or approval of a physician professionally, and hence his acceptability in a multitude of personal contacts determines the standing of the College physician among the students.

FRATERNITIES AND SORORITIES

Within this period a great development took place in fraternities and sororities. As early as 1901 local organizations had existed and several of considerable strength grew up. They could not become affiliated with national organizations as long as the admission requirements of the College were sub-standard. The adoption of fifteen units of high-school work for entrance opened the way, and from 1913 to 1915 several chapters of national fraternities and sororities were organized, based on well established groups operating under other names. This important development in the College deserves treatment in a separate chapter. President Waters was not enthusiastic in his support of them, but recognized their good features and maintained an attitude of sympathetic cooperation, but no official recognition was given to them.

DUPLICATIONS IN SCOPE

The alleged duplication of courses at the State educational institutions continued to engage public attention, and to serve as a basis for political strategy. The collapse of the attack in 1909 on engineering instruction at the College served only to create an interlude in the general controversy.

It was the opinion of many that there was a great deal of unnecessary duplication in the courses offered at the several institutions and that this was the occasion of much waste of public funds. The question is one which cannot be judged simply, and one's conclusion in any case will be influenced by his general views concerning public education.

If one holds the view that the education offered to the young people of the state should cost the taxpayers the least possible amount, then it would seem that each subject should be taught at one place only. This is the most extreme view, and it is usually conceded that there are certain general subjects that should be in the educational program of every one, and hence offering them at all the institutions does not constitute an avoidable duplication. Such subjects require the organization of many classes at each institution. Thus Kansas State College has about 100 classes in rhetoric each year, and the other institutions have similar numbers. Manifestly there would be no economy in having all of them on one campus. Similar considerations apply to many other subjects.

In respect to technical subjects, expense because of duplication intrudes at once when the number of students in a subject falls below that which can be handled efficiently in one class. Several small classes scattered about in the State are more expensive to teach that way than would be the case if they were consolidated at one point.

Increased cost also accompanies dispersion of instruction in subjects which require the provision of expensive apparatus, machines, and other equipment which may be used for only short periods at a time at any institution.

A fundamental consideration in the whole matter is that of the extent to which higher education is to be offered, and the fairness with which opportunities for it are to be created. It is a matter of common knowledge that at any educational institution a considerable fraction of the total student body comes from the immediate vicinity. Reducing the number of institutions in the State or the number of points at which instruction in a given subject may be obtained must necessarily cut down greatly the total number of students in the institutions and in the subject; that is, fewer students would be able to use the advantages offered.

Wise treatment of duplication in educational institutions is thus seen to require attention to several points not likely to be appreciated by persons not familiar with the work of education.

The legislature of 1911 met with this subject still prominent, and a bill was introduced which provided for the establishment of a State Board of Administration for the University, the Normal Schools, and this College, and for their control by such board. The bill received prolonged consideration, and after several amendments was passed by a vote of 97 to 15. In the senate an attempt was made to substitute another bill more in line with the views of the governor, but without success. The bill passed the senate by a vote of 22 to 16.

Governor Stubbs vetoed the bill in a message of considerable length which outlined the procedure which he thought preferable. The governor was a good friend of Kansas State College, and a resident of Lawrence. Having farm interests himself, he was in position to gauge the practical service rendered to the State by the College under the then existing system of control, and he was much impressed by the low cost of operation of all the State educational institutions when compared with the data for those of other states.

Governor Stubbs believed it to be possible to minimize duplications by conferences to be effected through a Commission on Higher Education. No effort was made by the legislature to pass the bill over the governor's veto, and shortly after adjournment Governor Stubbs called together the three Boards of Regents for a conference.

The boards organized as a Commission on Higher Education with the governor as chairman, and the State superintendent of public instruction as secretary *ex officio*. Committees were formed to study coordination, efficiency, business management, and fixed income, respectively. These committees did much excellent work, and a report of the committee on coordination was published addressed to the governor, members of the legislature, and taxpayers of the state.

The report of the committee on coordination included rather extended statements of the various types of work carried on by the several institutions, and consideration of these, forced recognition of the large areas of activity in which the institutions were and are practically independent.

There can be no doubt that the numerous conferences of Board and faculty members of the educational institutions initiated by Governor Hoch and promoted and increased by Governor Stubbs were potent agencies in the development of understanding among the institutions, and led toward cooperation rather than competition. The commission presented the bad results that had followed adoption of the one board system in certain states and advised against it for Kansas.

FIRST STATE BOARD OF ADMINISTRATION

The legislature of 1913 took up the question, and after deliberate consideration passed "An act to create a State Board of Administration for the University of Kansas, the Kansas State Normal Schools, the Kansas State Agricultural College, the Kansas School for the Deaf at Olathe, and Kansas School for the Blind at Kansas City, Kansas, and to prescribe its duties, and to provide for the management and control" of those institutions. This was effective February 12, 1913.

The law provided for a Board of three members, not more than two of which should belong to the same political party, and not more than one of which should be an alumnus of any one of the institutions under their control. The normal length of the term of office was four years, and confirmation of an appointment by the senate was required.

Each member received a salary of \$3,500 a year and necessary traveling expenses, and was expected to devote his entire time to the duties of the Board.

The law set forth in great detail the powers and duties of the Board, and other matters relating to it. It was required to elect the executive heads and all other officers and employees of the institutions, and to maintain a business office at each.

The immediate functioning of the Board in respect to duplication of work at the institutions was insured by providing that it should organize within ten days after qualification and "proceed to lay out and determine the work of said institutions for the academic year 1913-1914, and to make announcement thereof through the annual catalogues and other publications." Complete control of business matters and personnel did not ensue until July 1, 1913.

Gov. George H. Hodges appointed to be members of the State Board of Administration Mr. Ed. T. Hackney, of Wellington; Edward W. Hoch, of Marion, governor of the State, 1905 to 1909; and Mrs. Cora G. Lewis, of Kinsley. Mr. Hackney was elected president of the Board and was easily the dominant member in essential matters. To acquaint themselves to a certain extent with business matters of the College, and with procedure employed by the Regents, the members of the new Board met with the Regents at the meeting April 17, 1913.

In the exercise of its immediate authority over the academic work of the institutions, the new Board took very little action that affected Kansas State College in respect to courses or curricula offered. Work in engineering was even extended by approval of a four-year curriculum in agricultural engineering. The Board composed as it was of able and broad-minded persons manifested no disposition to do things without mature and adequate consideration. The ability of President Waters and his friendly relations with the members of the Board undoubtedly contributed much to the stability of the College position at this time and later.

At a meeting of the Board August 5, all the members being present, President Waters presented at some length the relation of the engineering departments of this College and of the University. After deliberation it was decided that President Waters and

Chancellor Strong should enter into a conference with reference to a differentiation of the work between the two institutions, and submit a report to the Board at some future time.

The attitude of the Board was evidently satisfactory to President Waters, as a record in the minutes states that President Waters announced that he would not accept the flattering offer made him in the East, but would remain in Kansas as head of the Agricultural College. The Board expressed its appreciation of his decision.

No record is extant of the conference between the executives, but in its second annual report for the year ending June 30, 1915, the Board stated that practically all unnecessary duplication had been eliminated in Kansas, and that:

The deans of the engineering schools at the University and at the Agricultural College, after the most patient and painstaking consideration, suggested a course of study for their respective schools which should satisfy the critics of these two schools, because it furnishes a reasonable solution of the long-mooted and much-discussed problem of duplication in them. In general, this agreement, now in operation, commits to the engineering school at the Agricultural College the task of equipping students for engineering work especially relating to farm life, while the school at Lawrence is to equip them more especially for urban work. These lines of demarkation could not be drawn too closely, but in the main their respective fields are thus well defined and in them they are now working most harmoniously.

The offering of a curriculum in journalism by this College had been subjected to attack, but though nothing was printed on the matter, President Waters was able to convince the Board that the relation of the College to agriculture and other industries was such that it would be restricted in its legitimate field of teaching and service if the curriculum in industrial journalism were abolished. This includes a requirement that all enrollees shall study a block of subjects related to an industry that they may thereby qualify themselves for service on technical journals in an industrial field.

The first Board of Administration may justly take credit for removing any basis for the old charge of wasteful duplication in the educational institutions. Its success was in large part due to the conferences that had been held and to the previous efforts of executives in this direction.

It is probable that the Board did not eliminate the superficially duplicating subjects among the institutions to the extent that the advocates of one-board control had expected, but the numerous

conferences tended to bring out the legitimate nature of many apparent duplications, and to check tendencies to unwarranted expansion. It is at least true that little has been heard in public protests within the last twenty years.

This first State Board of Administration was distinguished by the high character of its members, the balance in their interests and characteristics, and their unpartisan, judicial, and broadminded attitude. Not everything done was wise or permanent, but their work has a very high rank in the public service records of the State.

SECOND STATE BOARD OF ADMINISTRATION

In 1917 Arthur Capper became governor of Kansas. He advocated the abolition of unnecessary boards and consolidation where possible. It was stated with a good degree of credibility that his political opponents with a view to embarrassing him and his supporters introduced a consolidation bill that was so extreme that they had no idea that it would be adopted, but the rejection of which would tend to discredit the administration. However, Governor Capper accepted it, and it became a law.

This act established the second State Board of Administration. It had charge of all the State institutions, charitable, correctional, penal, and educational, twenty in all, and five branches besides. The act covers eight pages of the session laws, and is cumbered by a plethora of details which the Board found difficulty at first in interpreting. Many of these had no possible relation to an educational institution.

The Board was, and is, unique in that the governor of the State is a member and chairman by virtue of his office. He thus is made responsible in a management to which obviously he can give little personal attention. There are three additional members appointed by the governor for four-year terms, and subject to removal by him "when in his judgment the public service demands it." The law provides that members shall be chosen without regard to party politics and because of their fitness for the office, but the gubernatorial chairmanship and power of removal makes grossly partisan action possible.

This Board came into power July 1, 1917, and the educational institutions remained under it until July 1, 1925. The volume of its responsibilities being so enormous, it is evident that the individual heads of institutions must be allowed a very free hand in respect to the details of their local affairs. This was especially true of the educational institutions.

BUILDINGS

At the beginning of this administration the needs of the College in respect to buildings were fairly well met because of the remarkable success of President Nichols in getting appropriations for their erection. The appropriation for the gymnasium was not sufficient to complete it, and in 1911 \$22,000 was appropriated for this purpose.

One of the visions of President Waters was the erection of a splendid building for housing the agricultural departments. This was planned to include a central front building and two large



WATERS HALL

This view shows the southern aspect of the west (left) wing, the stock judging pavilion, and the east wing of the projected Waters Hall. The complete plan includes the construction of a large central building connecting the two existing wings and projecting somewhat farther to the south. These buildings are occupied by the academic work of the departments of agronomy, animal husbandry, dairy husbandry, economics and sociology, milling industry, and poultry husbandry.

wings connected with it extending toward the back. In the partially enclosed area the stock judging pavilion would be located. The east wing of this building, which in 1919 was named Waters Hall by the Board of Administration, was completed in 1913. The judging pavilion was also erected.

An appropriation of \$20,000 was made in 1913 for the construction of a barn, but it was found to be insufficient. In the meantime the second stone barn which then stood northeast of the east wing of Waters Hall was damaged considerably by a wind storm. It was decided to raze this building and use the material

in the construction of the new barn, and in that way to obtain a structure more in line with the needs of the institution. In that way the building now (1939) used by the department of animal husbandry was erected in 1914.

The legislature of 1909 made an appropriation for greenhouses which were built during the first year of this administration. An appropriation of \$5,000 for the athletic field was available in 1910-11. An appropriation of \$2,000 was made for a poultry house, including several laboratories, available 1911-12. In 1911-13, \$8,000 was available for fire escapes and other equipment for fire



VIEW TO THE NORTH FROM THE CAMPUS

View taken about 1925 which shows some of the structures north of the main campus. The principal building is the animal husbandry barn erected in 1914. At the left is the old veterinary clinics building, and at the right one of the barns used in experimental feeding, which had been moved over from the northeast corner of the main campus.

protection. The serum plant was moved to the location on the hill north of the College campus and the animal husbandry buildings to their present location north of the highway in 1914. In 1915-16, \$3,000 was available for the erection and equipment of a slaughter house. This was removed when Van Zile Hall was erected.

President Waters made repeated efforts to obtain an appropriation for a building for the use of the department of physics and electrical engineering, but the nearest approach to success attained was in 1917 when \$50,000 was allowed for remodeling and enlarging the old agriculture building, now Education Hall. Study and estimates indicated that an adequate building could not be made that way, and the appropriation was not drawn.

SALARIES AND MAINTENANCE

President Waters directed his efforts especially toward getting the legislature to increase the general appropriations for salaries, wages, maintenance, and increases in facilities and equipment. In addition to a lump sum each year, significant appropriations were

made for individual projects or departments. These cannot be shown here in detail. The total of the appropriations made for the College by the State legislature of 1909, the winter before Doctor Waters took office, was \$705,000, and the total made in 1917, the winter before he resigned, was \$1,339,762. These data are not altogether comparable, but show in a general way how extensive was the growth in public support during this period. The practice of obtaining appropriations for a specific purpose or individual departments was much extended and resulted practically in a great increase in the funds for maintenance.

A very embarrassing situation developed in respect to the payment of salaries for July and August, 1917. It had been the practice for some years to pay the annual salaries of practically all the members of the faculty in twelfths, and in most cases to consider the year of employment to begin September 1. It thus came about that one whose duties consisted of teaching only and whose work was therefore confined to a period of from about the 10th of September to the 10th of June received in the following July and August part of the pay earned during the previous academic year. In July, 1917, on advice of the attorney general the state auditor refused to allow payment of the amounts which were due members of the faculty and which the Board expected to pay in July and August. The basis of this refusal was that the fiscal year ended June 30, and that members of the faculty could not be paid for service ending June 30, 1917, out of appropriations made for the year ending June 30, 1918.

The result of this decision was that such salaries remained unpaid until the legislature of 1919 appropriated \$19,676.60 to cover them. Since that experience, the authorities have been careful to separate the members of the faculty into two groups, those employed on a nine-months' basis and those employed on a twelve-months' basis. The salaries of the former are paid in ninths and the latter in twelfths, and thus appropriations for the fiscal year in which the services are rendered are readily allocated. This makes it possible to employ a nine-months teacher for special service during June, July, and August, such as teaching in the summer school or doing research work in the Experiment Station.

WATERS AND THE SECRETARYSHIP OF AGRICULTURE

Shortly after Woodrow Wilson was elected President of the United States, a movement was started to obtain the appointment of President Waters to the secretaryship of the Department of Agriculture. Many felt that there was need for considerable improvement of conditions in that Department, and that President Waters

had the intelligence, experience, personality, and executive ability to do this work. However, although an extended campaign was carried on in his behalf, he was not appointed. The faculty was much pleased in respect to the College, even though regretting that the larger field of influence had not been given to its president. An enthusiastic social reception was given him and Mrs. Waters in which speeches were made, and in every way the genuine friendship of the faculty body was expressed.

THE WILSON BEQUEST

One of the pleasant incidents, and the first of its kind in the history of the institution, was receiving an announcement that a bequest of \$20,000 had been made to the College by Mehitable C. C. Wilson, of Boston, Mass., widow of the late Davies Wilson, formerly of Manhattan, to be used for the erection of a building or as a part of the endowment of the College as the Board of Regents might determine. This information was received early in 1912. Among the suggestions for the use of the Wilson bequest were erection of a girls' dormitory on the campus, or of a students' building, or a residence for the president. It was also suggested by Librarian Smith that it be made an endowment for the library, the income from which would be used for the purchase of books. The Board of Regents took *no final action*, but in April, 1913, it approved the suggestion of Librarian Smith but referred it for final action to the incoming Board of Administration. The bequest was not paid to the College until 1914, when with accumulated interest it amounted to \$21,750.

The Board of Administration took no effective action concerning the expenditure of this fund until May 10, 1922, when it adopted a series of statements and resolutions and ordered that a residence for the president be constructed under the immediate direction of the executive officers of the College; that it should be known as the Davies Wilson Memorial; and that a suitable tablet should be placed in the wall bearing witness to the generosity of Mehitable C. C. Wilson, the donor, and to the scholarly culture, pioneer courage, and lifelong public spirit of Davies Wilson, as a memorial to whom the legacy was given. The fund had been kept on deposit in a bank and with accumulated interest amounted to \$29,391.23, February 1, 1923. This met most of the expense of the erection of the president's residence on the campus. It was completed in 1923.

WATERS TO THE PHILIPPINES

Under the authority of an act of the legislature of the Philippine Islands, President Waters made a comprehensive investigation

of the agricultural conditions and possibilities of the Philippine Islands. He spent more than four months in collecting and compiling data, visiting most of the islands and nearly all the provinces, and investigating the natural resources of the country, the development and work of the schools, and the agricultural practices of the people. His report to the Philippine legislature covered about thirty-five pages and should have been of great value to the people of those islands.

President Waters was allowed leave of absence from May 1 to October 1, 1914. He was absent from May 8 to September 18. During this time Dean J. T. Willard was acting president. President Waters was accompanied by Mrs. Waters and their son Henry Jackson, Jr. When they left, several thousand people gathered at the Union Pacific station to bid them good-by. The cadet regiment was present in uniform, and the College band played. President Waters had given a farewell talk to the students at assembly, and he sent back from San Francisco a letter expressing appreciation of the generous and affectionate good-by and Godspeed accorded him and his family. The outbreak of the European war in July, 1914, caused him to shorten his stay in the Orient. He and his family slipped quietly and unexpectedly into Manhattan the afternoon of convocation day, the fall term, September 18.

SALARIES WHILE ON LEAVES OF ABSENCE

President Waters, in his desire to raise the standard of excellence of the faculty members as much as possible, realized the importance of making positions here attractive. His efforts took form not only in an increase in the general level of the salaries paid but in obtaining approval by the Board of Regents of a plan for leaves of absence on part pay. It was provided that sabbatic leave of absence might be granted to a member of the faculty who had served six full years. The plan approved was to employ someone at a lower salary to serve during the absence of the member on leave and to allow the faculty member the difference between the salary that he would have received and that paid the one employed during his absence. Naturally the temporary employee could not take over exactly the work of the absentee, but it would be handled by shifting it to ranking members of the staff. In consideration of this privilege, the faculty member on leave obligated himself to return and serve the institution for two years. Prof. L. D. Bushnell was the first to use the privilege of sabbatic leave, his absence beginning September 1, 1915. With one interruption this policy of granting sabbatic leave on part pay has been in continuous operation since that time.

RETIREMENT PLAN

President Waters was very strongly in favor of a carefully planned and authorized system of retirement on part pay to be available to a member of the faculty when he reached a certain age, or became partially incapacitated. But few, if any, members of the faculty of this College at that time would have been subject to the provisions of such a law, but the Board of Administration on account of conditions elsewhere did not take the matter up for action by the legislature because the initial expense would have been considerable. The establishment of such a system now would be much more expensive. The Board has, therefore, been limited to taking action with reference to individual cases in which the beneficiary continues to give some service to the institution.

FIFTIETH ANNIVERSARY OF THE COLLEGE

The Golden Jubilee of the College was celebrated in ample form October 28, 29, and 30, 1913. College classes were dismissed for the period, and the students as a body and in various organizations contributed much to the success of the programs. Tuesday the 28th was designated as "Students' Day," Wednesday as "Kansas-Alumni Day," and Thursday as "National Day."

The program for Students' Day included an afternoon procession of floats, livestock, and other exhibits illustrative of the equipment and activities of the College, and the development of these in the course of the half century. These were presented by students of the Divisions of Agriculture, Home Economics, and General Science. In the evening there was another procession with the same general object presented by the Divisions of Mechanic Arts, Home Economics, and General Science. This included electrical features. On account of an inopportune storm these processions could not be given Tuesday, but were presented with little disadvantage the next day.

The regular program for the second day was in two parts, the morning featuring Kansas, and the afternoon the alumni. Addresses were given in the forenoon by Governor George H. Hodges; State Superintendent W. D. Ross; Mrs. Cora G. Lewis, of the State Board of Administration; Geo. B. Ross, president, State Board of Agriculture; Frank Strong, chancellor of the University of Kansas; Thomas W. Butcher, president, Kansas State Normal School; and Henry C. Culbertson, president, College of Emporia. The music department provided relaxation from time to time in the course of the presentation of this formidable series of addresses, and also in later programs.

In the afternoon program, Wednesday, the addresses were by

persons who had received degrees from the College, in course or honorary, excepting that by William E. Blackburn, the grand old man of the Board of Regents which had a few months before yielded control to the Board of Administration. The alumni speakers were a former president, Ernest R. Nichols, Ph. D.; Frank A. Waugh, M. S., '91; Edward O. Sisson, Ph. D., '86; John D. Walters, D. A.; and Mrs. Emma Haines Bowen, M. A., '67. President Waters read parts of a letter from ex-President Thomas E. Will. These speakers treated subjects which covered the history of the College from the then present to the beginning, except Mr. Blackburn who took a look into the future. Wednesday evening was used for reunions of classes, fraternities, sororities, and other groups having interests in common.

Thursday, National Day, was marked by addresses given by men familiar with the broader national relations and obligations of the land-grant colleges. At the morning session Congressman Guy T. Helvering spoke on "Rural Credits"; Dean Eugene Davenport on "The Outlook for Agriculture"; and David G. Fairchild as a special representative of Secretary David F. Houston brought "A Message from the Department of Agriculture." Dr. John C. Jones, acting president, University of Missouri, presented "Greetings from Our Neighbors," and Dr. William J. Kerr, president, Oregon Agricultural College, extended "Greetings from the Pacific Coast."

At noon, luncheon was served by the Division of Home Economics, in Nichols Gymnasium, to more than 500 invited guests and subscribers. Under the guidance of their teachers the girls of the Division did all the work of preparation and service.

At the afternoon session, Thursday, Dr. Alfred C. True, of the Office of Experiment Stations, presented a painstaking review of "A Quarter Century of Experiment Station Work"; Dr. Winthrop E. Stone, president of Purdue University, ably discussed "The Land-Grant College in a State System of Higher Education"; and Mrs. Nellie Sawyer Kedzie Jones pleaded cogently for "Woman's Birthright."

At 4:00 o'clock nearly 600 cadets in eight companies participated in the finest drill that had ever been seen on the campus. It was under the inspiring command of Lieut. Roy A. Hill, and because of the short time since the opening of the year the students had by their own vote taken drill double the required time in order to be better prepared.

In the evening of this third day more than 2,000 attended a public reception held in Nichols Gymnasium. No receiving line at the College has ever been made up of more distinguished individuals,

including, with others, most of those who had appeared on one of the programs, to a total of about twenty-five.

The *Industrialist* from October 11 to November 8 carried ample notice of plans and full accounts of performance in respect to the celebration. Liberal extracts from some of the addresses were printed, and these so often dealt with fundamental questions and perennial problems that they are still pertinent presentations. It was especially pleasing to hear Chancellor Strong say that it was not feasible to confine each educational institution in the State to fixed, precise, and narrow limits. He showed that the large cost of education in the State was not due to duplication in the several institutions, but to the large number of students who were enrolled. To be equal to Kansas in its combined attendance at the University and the Agricultural College, Iowa, Wisconsin, Indiana, Michigan, Missouri, and Illinois, on the basis of ratio of students to population, would have had enrollments from 50 to 337 per cent higher.

President Stone, of Purdue University, touched upon the question of separate land-grant colleges compared with those which are parts of state universities, and recognized that there are good ones of both kinds. In respect to duplication when the land-grant college is a separate institution, he said, "In no other respect is this sin of duplication more to be deplored than in the matter of engineering schools." He made a strong presentation of the view that the teaching of engineering in the land-grant colleges was mandatory, and considered its inclusion in another state institution as unnecessary, and an expensive policy.

This volume does not provide space for describing, or even naming, the numerous events and features of this observance of the semi-centennial of the College, but it was an occasion of appraisal, congratulation, and promise, and no three days in the history of the College have been spent better than were those. The influence of President Waters in obtaining distinguished out-of-state speakers, the diligence of the faculty committee in organization and in planning for the features carried out by local groups and individuals, and the whole-hearted, laborious, and enthusiastic cooperation of all the students conspired to attain a happy and worthy result.

WATERS AND THE WAR

One of the great events which took place within the period of this administration was entrance of the United States into the World War, April 6, 1917. The publicity given to military operations in Europe and the disregard of Germany for the rights of American citizens had created in this country a highly prepon-

derating sentiment favoring the declaration of war, and students and faculty entered upon necessary action following the declaration with promptness and efficiency. Some members of the faculty obtained leaves of absence, and a number of students withdrew at once to enlist in national service. The war required the adoption of various measures and occasioned the introduction of many others. As President Waters resigned within six months after the entrance of this country into the war, and most of its special relations to the College occurred after that, it seems best to make a connected presentation of this period in a separate article.

One of the features adopted in connection with the war was the organization of the Kansas State Council of Defense, and the standing of President Waters in the State was forcibly indicated by the fact that he was made chairman of this Council, and that when he left the State he was urged so insistently to retain the chairmanship that he did so throughout the period of its existence. It may be mentioned here that the council made a comprehensive survey of the agricultural resources of the State in the spring of 1917 with special reference to the shortage of labor and possibly of seed for crops, and the need for planting maximum acreages in spring crops. In June, 1917, a force of twenty men from the Agricultural Experiment Station inspected fields of hard red winter wheat in order that a sufficient supply of good seed might be insured for fall planting.

RESIGNATION OF PRESIDENT WATERS

President Waters was appointed food administrator for Kansas, in September, 1917, and as this and other extra-College duties required much of his time, he asked Dean Willard to give considerable attention to matters in the president's office, and to do no teaching the first semester, 1917-18. However, no one was prepared for the announcement early in October that he had resigned, effective December 31, 1917.

Within the remaining interval of his connection with the College, the newspapers of the State published appreciative editorials of regret that he was going, and farewell meetings were held. To a meeting of alumni in Washington, D. C., Doctor Waters gave some of his reasons for leaving. He believed that he had made his contribution to the College, and that he should make way for an infusion of new blood. On account of his outside activities he felt that he was neglecting the College, and believed that he could be of more service in the existing emergency in his new field.

The faculty and employees of the College gave Doctor and Mrs. Waters and their son Jack a fitting farewell reception, Decem-

ber 17, where suitable resolutions engrossed on parchment were presented, accompanied by a generous gift for their new home.

Shortly after President Waters tendered his resignation, Dean J. T. Willard was designated to act as president, effective January 1, 1918. During the time that he served, January and February, Prof. Ralph R. Price was acting dean of the Division of General Science, and Prof. P. J. Newman acting head of the department of chemistry.

The resignation of President Waters was regarded as a mistake by many of his friends, even though he went "where the water was a little swifter." His whole previous life had been in educational institutions. Just at the moment there seemed to be no special problems for him to meet at the College, but the stress of war conditions increased, and he would have found his energies stimulated in the immediate future had he remained. He did good work on the *Weekly Kansas City Star*, but it lacked the evidence of immediate results which accompanies executive action in an institution, and was done in an atmosphere foreign to his previous experience. He carried on ably to his most untimely death, October 26, 1925, at an age just under sixty years.

A delegation was sent from the College to attend the funeral services for Doctor Waters which were held in the auditorium of the University of Missouri, October 29, and at the funeral hour the Kansas State College bell was tolled, and all activities were suspended for one minute.

October 31, memorial exercises were conducted in the auditorium, with addresses by representatives of the Board of Regents, faculty, alumni, and citizens of Manhattan. The occasion was a fitting recognition of the service that Doctor Waters had given the College. Though he had been gone from the institution for eight years, it still felt the greatness of his influence and personality, and the addresses served to pass knowledge of his work and character to the newer generation.



WILLIAM M. JARDINE

Agronomy, 1910-1913. Dean, Division of Agriculture and Director of Agricultural Experiment Station, 1913-1918. President, 1918-1925.

CHAPTER IX

THE ADMINISTRATION OF WILLIAM MARION JARDINE

MARCH 1, 1918, TO FEBRUARY 28, 1925

AS soon as the resignation of President Waters was announced in October, 1917, activity was initiated in the interests of various persons whose friends desired to have them appointed to the presidency. Rumors of various kinds were soon afloat, more or less well founded, and opposition to some of the persons suggested developed. The Board of Administration seemed to be making no nation-wide canvass of available material for the presidency such as the Board of Regents had conducted in 1908-09. As the weeks went by with no appointment announced, it began to be assumed that none would be made until after the close of the current college year. However, on February 28, 1918, the Board took action and elected Dean William M. Jardine president, effective March 1. At the same time Dean Willard was appointed to be vice-president in connection with his deanship of the Division of General Science.

ADDITIONAL DEANS

During the months of January and February, 1918, through which Dean Willard was acting president, no emergencies arose, but a few important actions were taken. One of these was to make the director of the summer school a dean. The reason for this was that the summer school work is closely connected with the work of students who are in the regular curricula administered by the deans of the Divisions, and it is important that summer school procedure be in harmony with the practice of the remainder of the year. With the director of the summer school a member of the Council of Deans, discussion and unification of practice are easily accomplished. Director Holton thus became Dean Holton, and the advantage of his being in the Council of Deans has been amply demonstrated.

The burden of responsibility resting upon Dean Van Zile, who was dean of women in addition to being dean of the Division of Home Economics, had become so heavy and complex that a division of the load seemed imperative. It happened that President Waters and Dean Willard had discussed this question, and the acting president took the initial steps to bring about this division,

although the action was not completed until after President Jardine had assumed the responsibility. The qualifications of Dean Van Zile to be dean of women can scarcely be excelled, and the change involved obtaining a suitable person to be dean of the Division of Home Economics. This requirement was met completely



E. L. HOLTON

Education, 1910—. Director of the Summer School, 1910-1917. Dean of the Summer School, 1918—.



HELEN B. THOMPSON

Food and Nutrition, 1918-1923. Dean, Division of Home Economics, 1918-1923.

by President Jardine in the selection of Helen Bishop Thompson, Ph. D. Doctor Thompson was graduated by Kansas State College in 1903, and had had many years of valuable experience in several phases of educational work in home economics, as well as much special study at Columbia University, and also at Yale University which awarded her the degree doctor of philosophy.

With the accession of Dean Jardine to the presidency, the positions filled in the College by him hitherto became vacant. On his recommendation, Prof. Leland E. Call, head of the department of agronomy, was made acting dean of the Division of Agriculture and acting director of the Agricultural Experiment Station, effective May 1, 1918. After careful consideration of persons available for that position, Francis David Farrell was appointed dean of the Division of Agriculture and director of the Kansas Agricultural Experiment Station, effective September 1, 1918. He was a young man, comparatively, but had had positions of responsibility in several phases of agricultural work. From 1914 to 1918 he had been

agriculturist in charge of agricultural development on government reclamation projects, United States Department of Agriculture. In Kansas State College he performed the duties of his position with such great ability and distinguished success that his appointment as President Jardine's successor, March 1, 1925, seemed a natural promotion.

INAUGURATION OF PRESIDENT JARDINE

Plans were made for the formal inauguration of President Jardine to take place on November 6, 1918, but the ceremony was indefinitely postponed because of an epidemic of influenza which developed in the State at that time. The inauguration was finally made a prominent feature of Farm and Home Week, and was held February 4, 1919.

The principal out-of-town speaker was Dr. Raymond A. Pearson, president of Iowa State College. The service of the land-grant colleges to the nation during the World War then just ended was stressed by him, and the opinion expressed that their establishment during the Civil War was an inspired act for the defense of the nation. Other speakers were Dr. Wilbur N. Mason of the Board of Administration, Dr. Frank Strong of the University of Kansas, Dr. S. A. Lough, president of Baker University, and Major General Leonard Wood.

Edward W. Hoch, formerly governor of Kansas and then vice-chairman of the State Board of Administration, inducted Doctor Jardine into office. In that connection he stated that the Board had searched the entire country, and then decided that Doctor Jardine was the best man available for the position of head of the Agricultural College.

In his inaugural address President Jardine brought a vision of the needs, responsibilities, and potentialities of education in the coming period of readjustment following the war. He sought a balance between vocational and liberal education, "a type of education which shall give a broad insight into the industrial world of activity and yet develop the individual's capacity for esthetic appreciation to the highest degree of which he is capable."

The inaugural ceremonies closed with a dinner in the College barracks followed by a reception in Nichols gymnasium. The domestic science department served the banquet. President Jardine spoke briefly and introduced Dean Farrell as the toastmaster. Speeches were made by Prof. S. A. Beach, Iowa State College, George I. Christie, assistant secretary United States Department of Agriculture, Dr. D. E. Kurtz, president of McPherson College, Dr. W. N. Mason and C. W. Green of the Board of Administra-

tion, Capt. Dan D. Casement, Dean J. T. Willard, Dean A. A. Potter, and Acting Dean Harry Umberger. Mrs. Jardine also responded to a toast given in her honor.

The reception in the gymnasium was attended by many hundreds. The main room had been beautifully decorated under the direction of Prof. M. F. Ahearn, and the orchestra led by Prof. R. H. Brown played during the evening.

SALARIES

The rise in the general level of prices incident to the World War operated as a reduction in the real salaries of members of the college faculty, since it was not accompanied by any corresponding increase in appropriations for salaries. The legislatures of 1915, 1917, and 1919 took no effective action toward remedy of this condition, though some concession was made by increasing the total, chiefly to provide for additional teachers. The legislature of 1921 increased the amount available from the \$677,000 allowed for salaries, wages, and maintenance for the fiscal year 1920-21, to \$859,000 for each of the years 1921-22 and 1922-23. This permitted a modest general increase in the salary rate for faculty members, which produced much rejoicing. As a rule, teachers are in their profession because of love for the work, but their proficiency is necessarily impaired if they are harassed by anxiety concerning adequate support for their families. The legislature of 1923 still further increased this appropriation to \$931,000 for each of the years 1923-24 and 1924-25.

LAND

The legislature of 1917 made an appropriation of \$80,000 for the purchase of additional land for the College. As the land desired was near that already owned by the College, it was difficult to agree with the owners upon prices that were satisfactory to the College authorities, but by direct contract the Leicester tract of 28.74 acres was purchased for \$6,000. Condemnation proceedings were instituted in respect to a number of other tracts, and damages were assessed by W. H. Donaldson, George H. Failyer, and S. J. Yena-wine, commissioners duly appointed by Fred R. Smith, judge of the district court. The Board voted to accept the following tracts and to pay the amount of the appraised damages for each:

Tract No. 6 containing about 29 acres owned by Minnie Colt Smith and appraised at \$7,100. Tract No. 9 containing about 160 acres owned by Charles L. Marlatt, Fred A. Marlatt, Mary A. Kimball, and Abby L. Marlatt, and appraised at the sum of \$38,400. Tract No. 10 containing

about 80 acres owned by John G. Matter and appraised at \$10,200. Tract No. 12 containing about one acre owned by Jacob P. Brubaker and appraised at \$1,300. Tract No. 13 containing about 54 and one-tenth acres owned by Roy G. Chandler and appraised at \$9,500. Tract No. 14 containing about 44 acres owned by Wilford W. Bales and appraised at \$6,600.

These purchases brought the total area of land owned by the College near Manhattan to 1,136 acres, and enabled the agricultural departments to plan and carry on experiments and operations of an amplitude that previously had been impossible.

In 1921 the legislature appropriated \$52,000 for the purchase of additional land, and with this several tracts were bought. For the use of the department of animal husbandry, pasture land was obtained from Mrs. Esther H. Robinson. This is located in section 6 of township 10, range 8 in Riley County, and includes all of lots 17, 18, 19, and 20, all of lots 5 and 10 except that lying east of the State road, and the west half of lots 16 and 21, a total of 247.28 acres. This cost \$37,500.

The following named tracts were bought for the use of the department of military science and tactics, and provided a building for residence and storage, and a site for a rifle range with distances up to 400 yards: The E. L. Hanlin tract, four acres costing \$3,000, is the east four tenths of the southwest quarter of lot 10, section 7, township 10, range 8. The C. A. Streeter tract, ten acres, cost \$10,000, and is the northwest one fourth of lot 17 in section 7 of township 10, range 8. The Elizabeth Hanna tract, a strip 99 feet wide from the west side of the east one half of the southwest quarter of lot 17, section 7, township 10, range 8, cost \$1,500, and has an area of one and one half acres.

BUILDINGS

As comparatively few appropriations for buildings were made during the Waters administration, the demand became insistent for additional space, and this was met in part by significant additions to the housing facilities for college departments. These may be considered for the most part in the order of their erection.

The war department in the summer of 1918 erected several wooden buildings on the campus for use as barracks and mess halls for men who were being trained in mechanical vocational lines, and for the Students' Army Training Corps. These were located northwest of the shops. For convenience in speaking of them they were designated by numbers corresponding to the order of their erection. Five of these were built parallel to each other in a block,

and received numbers 5, 1, 2, 3, and 4, beginning at the south. No. 6 provided toilets, a barber shop, and other facilities, and was located east of No. 5.

These buildings were taken over by the College later, and are often referred to by these numbers. They have been of great value to the College in providing space for which it would have been difficult to obtain legislative appropriations, but they constitute serious fire hazards. No. 4 is used (1939) in research work by the departments of agronomy, animal husbandry, chemistry, bacteriology, and zoology. No. 3 and the west end of No. 2 are used by the department of agricultural engineering as laboratories for tractors and other farm machinery. When the Heat, Power and Service building was erected in 1928, No. 1 and the east end of No. 2 were razed, and the main part of No. 5 was moved southeast to a point west of the shops where it serves as a warehouse. The west end of No. 6 is used as a locker room and storeroom by the Division of Engineering and Architecture, and the east end serves as an infirmary for students affected by contagious diseases.

These six buildings were taken over by the State at the close of the war in part payment for services rendered by the College, and have been serviceable structures.

Near the water tower a concession was housed where articles sought by soldiers might be purchased. This was a private enterprise. Farther east a hut was erected for the Young Men's Christian Association with United War Work funds. Both of these have been razed.

In 1919-1921 the central and west portions of Engineering Hall were constructed by the use of appropriations of \$50,000 for 1919-20, and \$90,000 for 1920-21, and including therewith in 1919-20, \$50,000 originally appropriated to provide quarters for the department of physics by enlarging the old agriculture building, now Education Hall. This building provided offices and laboratories for the departments of architecture, civil engineering, and electrical engineering, and offices for the dean. This was the most fire resistant building erected on the campus up to that date.

A building for instruction in institutional management, including practical operation of a cafeteria, tearoom, and banquet rooms, was occupied in November, 1922. This in 1925 was named Thompson Hall in honor of Dr. Helen B. Thompson, who was dean of the Division of Home Economics when the building was erected. The appropriation for the building and equipment was \$125,000.

The erection of the west wing of Waters Hall in 1921-1923, at a cost of \$275,000, was a very important addition to the plant. A very high type of fire-proof construction was employed. The

building provided ample quarters for the departments of dairy husbandry, poultry husbandry, and agricultural economics. At the same time an addition, at the north end, was made to the east wing of Waters Hall to provide a laboratory for instruction in meats.



THOMPSON HALL

This building houses the laboratory facilities for instruction in institutional management including a cafeteria and tea room. In 1925 it was named in honor of Dr. Helen B. Thompson, dean of the Division of Home Economics 1918-1923 and a prominent figure in home economics work elsewhere before and since that period.

The removal of the work in dairy manufactures, the salesroom, and the offices from the old dairy building released space that was immediately occupied by the department of chemistry, and used mainly for classes in chemical engineering and industrial chemistry. It was designated as Chemistry Annex No. II. In 1939 the name was changed to Chemical Engineering Hall.

The Division of Veterinary Medicine received substantial recognition of its rapidly growing importance by the erection of the central portion, and the north wing, of a commodious veterinary hospital for clinical instruction of students. This cost \$100,000, and was completed in 1923. It is a worthy exemplification of modern facilities for such work.

A residence for the president located on the campus had been much needed ever since fire, started by a lightning stroke, April 5, 1895, had destroyed the residence erected in 1885. Previous to 1885 the president had occupied the Preston residence, which was on the northwest one of the little farms that were bought to create the campus.

Mrs. Mehitabel C. C. Wilson had bequeathed \$20,000 to be used in some way as a memorial to her late husband, Davies Wilson. This bequest, for the use of which many suggestions had been made, had been considerably augmented by interest earned, and was still unappropriated. President Jardine convinced the Board of Admin-



VETERINARY CLINICS BUILDING

This portion of the incomplete building was erected in 1923 for the use of the Division of Veterinary Medicine.

istration that the erection of a residence for the president of the College would be a proper use of that fund, and he selected a convenient and beautiful site for it in the arboretum east of Anderson Hall. The residence was planned by Prof. Cecil F. Baker, head of the department of architecture, and was erected in 1923. It has been a most useful factor in the official and social life of the College. A tablet beside the front door testifies to the generosity of Mrs. Wilson.

A building which introduced a new feature in the College within this period was Van Zile Hall, a residence for women students on the campus. A movement requiring fifteen years for its fruition justifies treatment at greater length than is fitting at this point, and a separate article is given at another place.

The general interest in the Memorial Stadium, not only as a very valuable addition to the recreational plant of the College, but as a fine example of cooperative contributing in an expensive undertaking, and of successful financing, is such that a special article is

given to that subject. The stadium project was planned and carried out with the heartiest support of President Jardine.

Among minor but important improvements made was a swine barn with adjacent lots for pasture. The barn is especially designed for investigational work in breeding and rearing swine. Wood con-



PRESIDENT'S RESIDENCE

Residence of the president. This was erected in 1923 using funds provided by the bequest of Mehitabel C. C. Wilson, widow of Davies Wilson, an early resident of Manhattan and friend of the College. This stands in the wooded area formerly the arboretum, east of Anderson Hall.

struction was used, and the plant was erected in 1920 by the department of building and repair at a cost of \$10,000 for the building and equipment. Considerable economy was effected by this procedure.



BARN FOR SWINE INVESTIGATIONS

This building is on the area north of the campus. On adjacent land there are numerous small structures, a few of which are shown at the right.



BARN S USED IN EXPERIMENTAL FEEDING

This view shows part of the barn and yard formerly used for nutrition experiments with swine, also two small barns used for feeding experiments with cattle. These have been removed in order to fit the locality to be a site for Van Zile Hall.

POWER AND WATER SUPPLY

A thorough-going replacement and modernization of the power plant was begun in 1923, an appropriation of \$100,000 being available for the purpose. Two high-pressure boilers and two alternating current generators, 125 kilowatt and 250 kilowatt power, and a motor-generator set were purchased, and the necessary transmission cables and transformers were installed. A beginning was thus made in changing from a 220-volt direct-current to a 2,300-volt alternating current electrical distribution system on the campus. The units were purchased with the expectation of moving them to a permanent power building as soon as one could be obtained.

Additional attempts were made from 1919 to 1924 to obtain a more adequate and reliable supply of water. Numerous borings were made in exploration for water in suitable earth strata. In 1924 several air-lift pumps tapping a larger area of water-bearing gravel were installed, and a 60-thousand gallon underground storage tank provided in the southeast corner of the campus. Over it a substantial and not unsightly pump house was erected. Appropriations of \$10,000, \$12,500, and \$25,000 were used in making these improvements.

Though the waterworks system of the College had been developed on sound plans, and to a point of great reliability, the natural supply available was limited, and with the greatly increased demand for water it became necessary to use Manhattan city water in part. Manhattan had installed iron-removal and softening systems in its plant, thus providing water not only safe, but desirable in every other respect. However, the use of two types of water, one hard the other nearly soft, and in inconstant relative quantities, resulted in various inconveniences, and a favorable contract was made with the city of Manhattan to furnish the entire supply. This required the laying of larger mains at some points in 1938.

RECREATION CENTER

An important change in Anderson Hall was made in 1919, when the old assembly hall or "chapel" was transformed by removing the sloping floor and replacing it by one level with the remainder of the first floor of the building. The seats were not replaced, and the large room resulting became a social center for the students in which they may study, meet in small groups for committee work, or meet relatives or friends by appointment. The room was provided with suitable furniture and became at once a most useful adjunct in the daily routine of student life.

This room which by common usage became designated as Rec-

recreation Center is also available for dances and other social affairs given by student or faculty groups. Offices for the dean of women and for the men's adviser, who is also secretary of the Young Men's Christian Association, are located in the back corners, and are thus very accessible. The platform of the old assembly room was retained when the room was transformed and is now about a foot higher than the main floor.

The loss of a room which was very suitable for many meetings of student, faculty, and public organizations has been rather keenly felt, but this in part is obviated by seating the hall with movable chairs upon occasion. The social uses of Recreation Center have continued to grow, and its provision was an act of real and permanent value to the College through service to the students.

BARBER SHOP AND CANTEEN

The leveling of the floor of the old chapel greatly improved the basement space under it. Part of this was leased to Joseph Cooper for use as a barber shop, and to Elmer F. Kittell and his successor, N. S. Spangler, for canteen service. These establishments continued in operation until August 1, 1924, when they were excluded by order of the State Board of Administration. The receipts from these concessions had been used in a variety of ways for the benefit of the students. Mr. Spangler erected a building across from the college cafeteria and moved his equipment into it. The place is still operated (1939) as the College Canteen.

The barber shop and canteen originated as establishments for meeting the needs of enlisted men who were housed in the barracks, and at that time were located near those buildings.

STUDENT COAL-MINERS

An interesting episode occurred in November, 1919. A stubborn contest was on between operators of coal mines in southeastern Kansas and the miners. The strike threatened to paralyze State institutions because of lack of fuel. Gov. Henry J. Allen in order to prevent such a development undertook to see that men were provided to mine coal.

After obtaining an expression from the men students in college assembly, President Jardine telegraphed Governor Allen: "Fifteen hundred men students Kansas State Agricultural College authorize me to advise you they are at your service to mine coal to keep the home fires burning if you need them." In his reply Governor Allen said: "Your wire of 21st—greatly appreciate the spirit manifested by your student body. Kindly convey to them my hearty thanks."

Forty men were called for, Saturday, November 29, and the

first to turn in their names were sent, accompanied by Dr. A. A. Holtz, secretary of the Young Men's Christian Association. A call for 75 more was made, and they went Monday afternoon with Mr. Walter Burr, director of rural service, in charge at first, and later Chester H. Guthrie. Students from some of the other colleges of the State followed the Kansas State lead, and assisted in averting a coal famine.

At the mines the men were under military discipline, and the protection of detachments of the national guard. They were reported as doing excellent work in the strip mining employed. Student bosses were C. C. McPherson, Harry Keener, and M. P. Schlaegel. In an extended account of their work, the *Industrialist* included the names of the men who went. As other men were employed at the mines, the students were gradually released. They began returning about December 10, 1919.

ADMINISTRATION

The success of any executive depends to a large extent upon the personality, fidelity, and efficiency of the secretarial assistance. This is especially significant in the president's office. President Waters had brought to this service Miss Sabra E. Kennedy, a woman of exceptional ability, who had been his secretary in the University of Missouri. After her marriage, and some trials of other persons, Miss Lillian R. Shaw accepted this responsible position, and served through the administration. After assuming his duties as editor of the *Weekly Kansas City Star*, Doctor Waters called Miss Shaw to be his secretary. She resigned from the College position, January 20, 1918, thus leaving the way clear for President Jardine to select his own secretary. He chose to transfer Miss Lena L. Price from the office of the dean of the Division of Agriculture where Doctor Jardine had become acquainted with her superior qualifications. Miss Price resigned August 31, 1920, and Mr. Clarence O. Price was appointed assistant to the president, effective September 1, 1920. Mr. Price had had considerable business experience, and has continued to the present (1939) to give accurate, patient, and efficient service in the office of the president. The position calls for qualifications in fields not always realized, and Mr. Price has amply shown his competence in them.

DIVISION OF AGRICULTURE

In the Division of Agriculture the administration of President Jardine met the resignation of two of its ablest and most experienced men, Prof. W. A. Cochel and Prof. O. E. Reed, heads of the departments of animal husbandry and of dairy husbandry, respec-

tively. Professor Cochel had served from July 4, 1912, and his resignation was effective June 30, 1918. He left to become southwestern representative of the American Shorthorn Breeders Association. On the death of Doctor Waters, Professor Cochel succeeded him as editor of the *Weekly Kansas City Star*. The resignation of Professor Reed was effective August 30, 1918. He had served from September 20, 1910, and went to Purdue University as head of the department of dairy husbandry.

It was fortunate for the College that in the department of animal husbandry Dr. Charles W. McCampbell was on the staff as associate professor. He was made head of the department July 1, 1918. Professor McCampbell has the unique distinction of having been graduated from three curricula in this College, general science, 1906, veterinary medicine, 1910, and agriculture, 1918. He has been connected with the department of animal husbandry since 1910, and his suavity, common sense, education, practical experience, and readiness in written and oral speech have combined to create notable success for him in his departmental work as a teacher and investigator, and in his contacts with the public.

The promotion of Professor McCampbell was followed by the appointment of Floyd W. Bell to be associate professor of animal husbandry from September 1, 1918. His excellence, especially in the field of instruction in stock judging, has received country-wide recognition, and led to his promotion to the rank of professor, July 1, 1921.

Immediately after the declaration of war, Edward N. Wentworth, professor of animal breeding, and an able, effective, and popular member of the staff, obtained leave of absence and enlisted in the army. He entered an officers' training camp at Fort Riley and was commissioned a captain in the field artillery. He did not return at the close of the war, becoming a member of the public relations department of Armour and Co., Chicago. His resignation made possible the employment of Heman L. Ibsen as professor of genetics, who began service July 1, 1919, and who has created an enviable reputation in his field of science, for himself and the department.

Among others employed on the staff of the department of animal husbandry within this period, there still remain (1939) Prof. Arthur D. Weber, Prof. Cliff E. Aubel, and Assoc. Prof. David L. Mackintosh.

In the department of dairy husbandry, Assoc. Prof. J. B. Fitch was made professor of dairy husbandry and head of the department September 1, 1918, to succeed Professor Reed. He had been with the department since October 6, 1910, and his promotion was

a natural recognition of his excellent personal and professional characteristics. He fully justified this action through many years of service of the highest quality.

Prof. L. E. Call, head of the department of agronomy, was given leave of absence to direct the instructional work in farm crops in the Army Educational Corps of the American Expeditionary Forces in France and Germany after the World War, and to select the personnel for this work. He left the College for this purpose January 21, 1919, and returned September 1, 1919. During his absence Prof. S. C. Salmon was acting head of the department.

Prof. John H. Parker, who entered the staff of the department of agronomy November 1, 1917, attained distinguished recognition during this administration and has maintained it to the present. Few men exhibit so fine a combination of genial personality, institutional pride, and scientific accuracy. He became professor of crop improvement and was especially noted for his work with wheat, the varieties Tenmarq and Kawvale being largely the result of his labor. He remained with the College until January 31, 1939, when he resigned to promote the introduction of better wheat on Kansas farms under the auspices of the Kansas Wheat Improvement Association.

The interest in the prosperity of agriculture felt by President Jardine, and his study in that field of thought, led early to one of the most important features of his administration. This consisted in dividing the department of economics and sociology headed by Prof. J. E. Kammeyer in the Division of General Science, and creating a department of agricultural economics in the Division of Agriculture. This led to some duplication in the basic course offered by each department, but this was adjusted by not allowing a student credit for both courses.

Special attention had been given to agricultural economics since January 1, 1914, when Edward D. Baker was elected assistant professor of rural economics. He was succeeded September 1, 1915, by Theodore Macklin, an able, ambitious, high-strung young man, a graduate of Iowa State College and near to his doctorate from the University of Wisconsin. He had given excellent service for two years.

Professor Macklin had been absent on leave from October, 1917, cooperating with a group in the study of some of the land problems of Mexico. Effective July 1, 1918, he became head of the newly established department of agricultural economics. Waldo E. Grimes, assistant professor of farm management, was associated with him, and was made associate professor of agricultural eco-

nomics July 1, 1919. Professor Macklin resigned his position August 31, 1919, and Professor Grimes was placed in charge February 1, 1920. He was made head of the department and professor of agricultural economics July 1, 1921, and was absent on leave October 1, 1921, to August 31, 1922. Professor Eric Englund joined the department July 1, 1921, and was in charge during the absence of Professor Grimes.

From the return of Doctor Grimes to the present time the department has exhibited continuous activity and growth. At the close of President Jardine's administration (1925) its faculty consisted of Professors W. E. Grimes, Eric Englund, Roy M. Green, Assistant Professor Morris Evans, Instructors J. A. Hodges and Harold Hedges, and Assistants R. D. Nichols and J. H. Moyer. This force was occupied in teaching, and in several lines of research concerning farming as a business, and as a permanent part of the fundamental economic life of the nation. The repute of the department has become such that members of its faculty are constantly serving as advisers in respect to economic policies as related to agriculture, and several have been drawn away into government service. It is not too much to say that this repute is due to the ability, unsurpassed industry, and administrative judgment of Doctor Grimes, who has simultaneously carried heavy extra-departmental responsibilities with conspicuous success.

The department of poultry husbandry had grown steadily in importance and recognition since its separate organization under Prof. W. A. Lippincott in 1912. This development led to the establishment of an associate professorship and the election of Loyal F. Payne as the incumbent, effective February 1, 1921. The repute of Doctor Lippincott was such that he was invited to take a similar position in the University of California, and he resigned, effective July 31, 1923. This was not only a loss to this department of the College but also to the graduate council of which he was chairman, and in the organization of which he had been especially successful. Professor Payne succeeded to the headship of the department and has conducted it with marked aggressiveness and ability, and now (1939) continues in the same capacity.

The department of milling industry was materially strengthened by the addition of Dr. E. B. Working to the staff September 1, 1923. His value is attested by the quality of the research which he has conducted. He is still (1939) a member of the department.

The department of horticulture survived a body blow which it received when Michael F. Ahearn, professor of landscape gardening, was drafted to become head of the department of physical education. This loss was repaired by the recall of Robert J. Bar-

nett from Washington State College to be professor of horticulture, and the employment of Wm. S. Wiedorn to be instructor in landscape gardening. By reason of his versatility, Professor Barnett had filled with conspicuous success several different positions here and elsewhere before going to Washington. Since his return he has amply justified expectations, and is still in active service (1939). Messrs. Barnett and Wiedorn assumed their positions October 10 and November 15, 1920, respectively. Walter B. Balch had begun service the February 1 preceding, and continued in charge of the greenhouses and of gardening until July 31, 1937, attaining the rank of associate professor of horticulture.

THE AGRICULTURAL FAIR

An enterprise promoted by Dean Farrell as an agency for developing divisional consciousness and solidarity was the agricultural fair. This was first held May 3, 1921, and was organized and presented wholly by students. It included a long and varied parade through the campus and Manhattan streets, and numerous exhibits out of doors and inside demonstrating work of the division. The entertainment mingled information with fun and frolic. The fair was continued as an annual feature for many years.

AGRICULTURAL EXPERIMENT STATION

The Agricultural Experiment Station continued its extensive work during this period. When Director Jardine became president, Prof. L. E. Call was designated to be acting director of the Station from May 1, 1918, pending the selection and appointment of a director. F. D. Farrell was appointed director, effective September 1, and ably performed the duties of the office until he succeeded to the presidency.

An extension of the work and usefulness of the Station consisted in the establishment of five experimental fields in southeastern Kansas. The legislature appropriated \$6,000 for this purpose available July 1, 1923, for the biennium ending June 30, 1925. The soils of that region are distinctly different from those in other parts of the state, and experimental results obtained elsewhere may not be applicable there. This type of work is still carried on and has been extended to farms in northeastern, south central, and southwestern Kansas.

The details of the work of the Station cannot be given here even in outline, but attention may be drawn to the fact that printed reports by the director which after some years of omission were renewed by Director Jardine in 1913 were continued in fine form by Director Farrell.

In the 27th biennial report of the College, 1916-1918, President Jardine gave a comprehensive account of the work of the Experiment Station as related to the World War. This also serves as a general view of the immediately practical results attending agricultural investigation.

President Jardine made use of the results of Experiment Station investigations in an optimistic presentation of the financial value of the Station to the State, which appears in the 28th biennial report of the College, 1918-1920.

The report of Director Farrell for the year 1919-20 includes a very valuable compilation of the publications of the members of the Experiment Station staff from 1888 to December 31, 1920. This provides references not only to the several types of Station publications, but to important articles published elsewhere.

At the Fort Hays Branch Experiment Station, Supt. Charles R. Weeks resigned May 1, 1920, to become secretary of the State Farm Bureau, and Harry L. Kent was appointed to succeed him. Upon his resignation September 15, 1921, Louis C. Aicher became a most worthy successor, and has continued to the present (1939) to render his valuable service.

One of the best innovations of this administration was the inauguration of luncheons by members of the Agricultural Experiment Station staff and others interested. These at first were given in the mess hall of the army barracks, and since the discontinuance of service of meals there they have been given in the cafeteria. Director Farrell through this feature promoted personal acquaintance among members from different departments of the Station staff, and also extended knowledge concerning the projects under investigation. These occasions give opportunities for hearing talks by out-of-town specialists, and reports on conventions attended by local officers. Their influence and value can scarcely be overestimated, and attendance has always been maintained at practically 100 percent of the personnel involved.

DIVISION OF ENGINEERING

The Division of Engineering undoubtedly exhibited greater growth in its physical plant during this administration than did any other, though some of it was not of a desirable character. Incidental to the war service, eight wooden buildings were erected, of which six were assigned later to the use of engineering departments. Though badly adapted to the purposes to which they were assigned, and a constant fire hazard, they do inclose space and have been of great service for the time being.

A splendid addition to the permanent provisions for the Col-

lege was made in 1921 by the erection of the central and west sections of Engineering Hall. The shops were enlarged to the west and additional gallery floors were placed in the older part of Engineering Hall in 1918 to provide space for instruction to be given to enlisted men.

Dean Potter's time in 1918 was to a large extent given to supervision for the War Department of the work in several of the mid-western states in the training of drafted men in various mechanical



R. A. SEATON

Mathematics, 1904-1906; mechanical engineering, applied mechanics, machine design, hydraulics, 1906-1923. Dean, Division of Engineering, 1920-1938. Dean, Division of Engineering and Architecture, 1938—, Director of the Engineering Experiment Station, 1920—.

lines applied in warfare. He rapidly attained a national reputation for professional excellence coupled with boundless industry, and for rare executive ability and personal acceptability. He resigned his position, effective August 31, 1920, to become dean of the college of engineering in Purdue University.

Fortunately for the College, Prof. Roy A. Seaton was on the staff. From his admission as a student in 1901 to his graduation in 1904, and in study for several years elsewhere, he had maintained a record of serious application and excellent accomplishment. He had filled several positions at the College and at this time was professor of applied mechanics and machine design. He was elected dean of the Division of Engineering, effective September 1, 1920, and

since then has administered the highly complex and exacting duties of that position with the comprehension and coordination of details that marks a great executive. His capacity has been further recognized by assigning to him important and burdensome general college duties which have been ably performed.

Professor Seaton served in the World War as a captain in the ordnance office. Other engineers in the service who were members of the faculty were H. B. Walker and A. J. Mack. Prof. W. W. Carlson, though not in the military service, gave very valuable assistance in the organization and oversight of the vocational educational work for enlisted and drafted men that was given in 1917

and 1918. In this he had the cheerful and essential cooperation of teachers of subordinate rank, among them D. E. Lynch, E. C. Jones, and Edward Grant.

During this administration the staff of the department of shop practice was increased because of the great expansion in the vocational work offered. The fine organizing ability of Professor Carlson found ample scope for its exercise. Among the especially valuable staff members were Associate Professor Gabe A. Sellers, and Assistant Professors Edward C. Jones and David E. Lynch, who still remain in service, and Eugene C. Graham, who remained until his death in 1936. One of the victims of the epidemic of influenza was William H. Ball, instructor in woodwork, who died October 17, 1918, from pneumonia as a sequel of influenza. He was highly esteemed for his fine personality as well as his ability as an instructor.

Development of the Division of Engineering was directly stimulated by the service which it gave to soldiers during the war, and by the courses for veterans presented in their educational rehabilitation. Considerable change in the personnel took place which lack of space and time prevents treating in any extended way. Many who were first employed within or near this period remain to the present (1939). The work of most of these men is in classrooms or laboratories, and their success is registered in the minds and lives of their students, but probably never is blazoned in the headlines of newspapers. It is difficult to characterize each briefly in a manner that would be just and generally informative. The present writer has not the technical and other special knowledge necessary for such a presentation. It may be safely stated that one who has remained in the sieve after fifteen or twenty years of shaking has thereby proved himself successful to a high degree, and in no Division of the College is this more certain than in that of Engineering, and especially in the cases of heads of departments.

Professors Conrad and Carlson were brought along from previous administrations as heads of the departments of civil engineering and shop practice, respectively.

In the department of farm engineering, Prof. K. J. T. Ekblaw resigned June 30, 1919, after two years of service. The office remained vacant for two years, during which time Prof. W. H. Sanders was in charge. July 1, 1921, Harry B. Walker was transferred from the Division of College Extension and made professor of agricultural engineering. The name of the department was changed correspondingly. Professor Walker continued rendering the excellent service which he had given since 1910, until he was attracted to the University of California. He closed his Kansas

State College connection June 30, 1928, and was succeeded by Prof. Frederick C. Fenton, July 1.

One of the last changes made in the previous administration was to make Professor Walters professor of architecture, *emeritus*, and to appoint Cecil F. Baker to be professor of architecture and head of the department. Professor Baker was eminently successful in this work, but he resigned August 31, 1923. Associate Professor Paul Weigel, who came into the department September 1, 1921, was made acting head, and September 1, 1924, head of the department. He has continued in that position to the present (1939) and has developed this field in a masterly manner. John F. Helm was added to the staff in 1924, and has contributed much by his versatility and competence in the fine arts, and his public presentations of these subjects. In rural architecture, Henry E. Wichers has been of state-wide service since coming as an instructor July 1, 1924. Prof. Frank J. Cheek, appointed in 1923, was a valuable member of the staff for many years.

For three years after becoming dean, Professor Seaton retained the headship of the department of applied mechanics and machine design, but September 1, 1923, the department was divided, and Prof. Charles H. Scholer became head of the department of applied mechanics, and Prof. Clinton E. Pearce of the department of machine design. Each had been amply tested by previous employment in the old combined department, and they had been made professors in their respective fields in 1922. Each has continued to serve with excellence in his position of greater responsibility to the present (1939). Other men of this period who continue to add strength to these departments are Professors Jules H. Robert and Earle R. Dawley in applied mechanics, and Professors Merrill A. Durland and Floyd A. Smutz, and Associate Professor Randolph F. Gingrich in machine design. The fine executive ability of Professor Durland led to his appointment to be assistant dean of the Division of Engineering September 1, 1926.

The department of electrical engineering under the able administration of Prof. Clarence E. Reid maintained its high standing, and of men still (1939) on the staff added within this administration, are Jesse L. Brenneeman who came as an assistant professor, September 1, 1920, and Russell M. Kerchner who came as an instructor, September 1, 1922.

When he was appointed dean, Prof. A. A. Potter was head of a department designated as steam and gas engineering. He continued in this capacity, but with the weight of duties which accumulated during the war his connection became less effective, and December 1, 1918, James Park Calderwood was appointed professor of steam

and gas engineering, and the next year the department was put in his charge, and he was made its head, July 1, 1920, when Dean Potter resigned. In 1919 his title was changed to professor of mechanical engineering, and in 1922 the name of the department was changed to mechanical engineering, with no change in the courses which the department handled.

Professor Calderwood represented a splendid type of college professor and remained at the head of this department until his death August 9, 1934. Associated with him in the department were Associate Professor Albert J. Mack and Instructor B. B. Brainard, who are still on its staff (1939), with increased rank and responsibility.

ENGINEERS' OPEN HOUSE

The annual display made by the students of the Division of Engineering had its beginning in an exhibition and parade organized and presented in connection with a meeting at the College of the Kansas Branch of the National Association of Stationary Engineers, May 1 to 4, 1917. Floats, mechanical devices, and illumination features indicated the fertility of the engineering mind. The parade was headed by a miniature tractor designed by W. W. Carlson, assistant professor of shop practice, and constructed by the senior mechanical engineers. Engineers' Open House has developed from this into one of the most numerous attended events of the college year. It demonstrates the results of much planning and much hard work by the students.

DIVISION OF GENERAL SCIENCE

The Division of General Science was not affected in its regular functions by the war as much as were the Divisions of Agriculture and Engineering. After the war, the great increase in the number of students in the College was due largely to an increase in the Division of General Science. The enrollments of students of college grade in the Divisions for the years 1918-19 and 1924-25, respectively, were: Agriculture, including Veterinary Medicine, 621 and 588; Engineering, 496 and 886; Home Economics, 455 and 571; General Science, 423 and 1244; totals, 1995 and 3289.

The superior opportunity for interesting war service that was open to young men with some college education was a potent factor in the rush to the colleges which followed the war. This affected the liberal arts colleges as much as it did the technical, if not more, and the tendency was exemplified by the growth of the Division of General Science. This increase in student load was only incompletely met by additional buildings. The erection of buildings for

the use of certain departments, which vacated their former quarters, permitted shifts that relieved pressure on other departments to a certain extent.

Prof. Leo Edward Melchers formally succeeded Prof. H. F. Roberts as head of the department of botany, July 1, 1919. He had been acting head from October 1, 1917, on account of the impaired health of Professor Roberts. Professor Roberts was on leave of absence to September 1, 1918, and on half-time service for the year ending August 31, 1919. During this time he prepared material for publication in concluding his connection with the College. Later he became professor of plant breeding in the University of Manitoba. At the instance of Professor Melchers, the name of the department of botany was changed to that of botany and plant pathology in 1920, in recognition of the importance of the work carried on in respect to plant diseases.

Effective July 1, 1918, Prof. Herbert H. King, Ph. D., became head of the department of chemistry, as Professor Willard found ample occupation in the offices of dean of the Division of General Science and vice-president of the College. Professor King had just returned from a year's leave of absence. He was prepared for his added responsibilities not only scholastically but by the fact that for several years he had been given a large part in the administration of the department. His personal acceptability made this recognition of his professional superiority especially pleasing to both students and faculty members. Doctor King had been with the chemistry department since September 1, 1906, had been promoted in rank from time to time, and had done much research on paints in connection with the Engineering Experiment Station. He was amply qualified by personality, education, and experience to take over this, the largest department of the College, and has fully justified all expectations concerning his success by enlarging the scope of instruction and research, and raising the academic and professional standards of the personnel of the department. The staff increased from 16 in 1918 to 25 in 1925.

Of the present (1939) staff of the department of chemistry of professorial rank, there were added within this period: Charles W. Colver (1919), William A. Van Winkle (1922), Joseph L. Hall (1922), Ernest B. Keith (1918), Alfred T. Perkins (1925), Mendel E. Lash (1922), and Stella M. Harriss (1917). Their scientific attainments and the excellence of their work are evidence of the good judgment used in their selection.

The academic rank of the members of the staff of the department of education has always been high, since they are occupied practically wholly with senior college subjects. The department

got well under way during the Waters administration and had five staff members at its close, all of professorial rank. At the end of the Jardine administration there were eight. To Professors E. L. Holton, W. H. Andrews, and John C. Peterson, remaining from the older staff, had been added Professor Cyrus V. Williams, 1920; Professor Vivan L. Strickland, 1917; and Associate Professor Allan P. Davidson, 1919, who remain in the department, and others who are no longer there.

For the year 1918-19 Dean E. L. Holton was given leave of absence that he might assist the Federal Board for Vocational Education in planning vocational rehabilitation of wounded soldiers. This work took him to France, where he visited hospitals and presented to wounded men the plans of the Board for education and training of injured soldiers.

APTITUDE TESTS

Through the enthusiasm and competently directed energy of Dr. John C. Peterson, of the department of education, mental testing of freshman students on admission to the College was established. The impetus to such testing was due largely to the success attending the use of intelligence tests in the national army during the World War.

The beginning of mental testing at the College was with a group of students from the freshman class in 1919. These volunteered for the tests, and all Divisions of the College were represented. By action of the Council of Deans such tests were required of all freshmen in 1920. At that time the work was largely investigational, the object being to ascertain its value, if any. The requirement of such tests was first announced in the catalogue in the issue for 1925-26. Two sessions from 1:00 to 4:30 p. m., September 15 and 16, 1926, were provided for them. With various modifications tests of aptitudes have been continued to the present (1939).

In thousands of instances the results of these aptitude tests have been checked by Doctor Peterson with the scholastic rank attained by students in several types of subjects in college curricula, and he has found a high degree of correlation to exist. Such tests must necessarily be simple and deal only with the broad bases of intellectual activity. The human organism is too complex to be measured in all its details. The physical responses to mental stimuli are no less vital to success in many occupations than are the more purely intellectual. In the ranges of the esthetic arts, ability of a measurable kind is perhaps still less dominant in its function.

Recognition being always given to the impossibility of obtaining complete data concerning the life activities to which a given

individual is adapted, the fact remains that ascertainable data are sufficient to enable a competent adviser to give valuable counsel in respect to suitability of a vocation. By obtaining such counsel, a student may be saved a good deal of more or less futile effort. Competition is so keen among those having acute intelligence that those who are much below in this natural endowment may be advised not to enter the contest in occupations in which intellectual ability is dominant in attaining success.

The results of aptitude tests, if available to deans, teachers, and disciplinary officers, may be of much assistance in forming helpful judgments in respect to student performance. Records of mental tests are now frequently demanded as a preliminary to consideration for important appointments, and the records that are accumulating may prove to be of great future value in individual instances. Students in increasing numbers who enter with advanced standing are calling for these tests.

TEACHER TRAINING

Although Kansas State College is not organized as a teacher-training institution, it functions as such, especially in the preparation of teachers of sciences, agriculture, home economics, and mechanic arts. The required work in several of the curricula needs only to be supplemented by some courses in professional education to provide the schooling needed to qualify one for teaching. When this training is given to one having the requisite specific native endowment, personality, and character, a teacher may be produced equal to that of any institution.

The teacher-training work was greatly extended during this period. The demand for teachers who are qualified to give vocational training under the requirements of the Smith-Hughes Act had its beginning in 1917, when this act was passed. Arrangements for rendering it effective required a year or more.

In Kansas the State Board of Education is the authorized agency for cooperating with the Federal Board for Vocational Education, and for administering the Smith-Hughes vocational teaching in the State. The Board approved this College as an institution for the training of teachers of agriculture and of home economics, and under this approval the College is reimbursed to a certain extent for salaries and other costs incurred in such teacher training.

It was unquestionable that the College had the facilities and equipment in laboratories, herds, and fields to give the education and training in the sciences and practical arts needful for a teacher of agriculture or home economics. The practice in teaching was

given at the College in the Vocational School, and by cooperation with the schools of Manhattan and certain rural schools.

Professors who gave part or all of their time to college instruction under the provisions of the Smith-Hughes Act, or to superintendence of such work in the high schools of the State, were placed on the faculty, and they or their successors are now in service. Professors Harry L. Kent, 1911, and Cyrus V. Williams, 1920; Associate Professors Margaret M. Edwards, 1920, Maud Williamson, 1923, and Allan P. Davidson, 1919; and Assistant Professor Alice Lloyd-Jones, 1918, participated in this work within this period.

Harry L. Kent, associate professor of education and principal of the School of Agriculture, was permitted by the Board of Administration to accept from the State Board of Education the direction of vocational agricultural education to be given in Kansas high schools under the provisions of the Smith-Hughes Act. This was effective February 1, 1918, and required about one half of his time. On this date James W. Zahnley, instructor in farm crops, was made assistant principal of the School of Agriculture. On account of the absence on leave of Dean Holton, Professor Kent was made acting head of the department of education effective October 1, 1918, and acting dean of the summer session for 1919.

Professor Kent's demonstration of sound practical sense, and his ample experience and sterling ability, led President Jardine to transfer him about May 15, 1920, to the difficult position of the superintendency of the Fort Hays Branch Experiment Station, which had become vacant by the resignation of Charles R. Weeks. Superintendent Weeks had given highly satisfactory service, and resigned to become secretary of the Kansas State Farm Bureau, and for various reasons the president felt that one with the qualifications of Professor Kent was needed as a successor. Professor Kent accepted with some reluctance, but carried the work with the success expected, until he resigned September, 1921, to become president of the New Mexico Agricultural and Mechanical College.

STUDIES OF GRADING

A field of study, the results in which probably have had considerable influence in the College, is that of grading the work of students. While attention to this is given by every teacher, members of a department of education are all likely to give it more acute study. Prof. Vivan L. Strickland carried on detailed studies of the grades awarded by all the teachers in the College in all subjects taught. The results were very illuminating in respect to the range of grading when different subjects are compared, and also

among teachers of cognate courses. Professor Strickland's studies were reported to the faculty and aroused much comment, both favorable and unfavorable. They doubtless led teachers to the exercise of greater care, and probably to an increased use of objective tests.

It is unfortunate that the educational process must be involved with, and in many cases be burdened by, the giving of examinations for the purpose of ascertaining proficiency, and by the necessity of awarding a grade, but as long as graduation from a college, or satisfactory completion of a course, is taken as legal or presumptive evidence of qualification for a position as a teacher, or for service in some other capacity, awarding grades will be unavoidable. Furthermore, as long as this condition obtains it will be the duty of every teacher to make his grading as accurate as possible, performing the work with not only the personal relations of the student and the teacher in view, and the relations among students, but with a sense of his obligation to the public which is depending on the fidelity of himself and others in respect to the significance of passing grades, and diplomas certifying to graduation.

UNDERSTANDING THE WAR

A notable event in the department of English was the resignation of Prof. James W. Searson. Professor Searson's contact with the department was much impaired by his leave of absence for the year 1917-18 which blended into his service for the War Department as managing editor of *National School Service* which was published twice a month from September 1, 1918, to May 1, 1919, by the committee on public information of which Mr. George Creel was chairman.

That periodical was the final form taken by that committee in its efforts to mold public opinion through the teachers and students in the graded and high schools. Professor Searson was a pastmaster in reporting, and in preparing material for effective public use. His genius found ample scope for expression in this journal, the purpose of which was stated in part as "to carry into every school in the land, in some unified usable way, the lessons of the war, and the program for the schools of the many national agencies responsible for the conduct of the war." Professor Searson enjoyed the cooperation of a distinguished corps of special editors, and a 16-page paper was produced which is very interesting reading even at the present time.

During the two years of Professor Searson's absence, 1917-1919, Dr. John R. Macarthur was acting head of the department of English and performed the duties with rare ability. He resigned

effective May 31, 1920, to accept a responsible position in the California Institute of Technology, where he is still.

Professor Searson resigned effective June 1, 1921, and Prof. Hallam Walker Davis was appointed as his successor from July 1, 1921. Professor Davis has administered the department in an effective, liberal, and democratic manner, and has done much to give it local influence and service.

LECTURES ON LITERARY THEMES

Among the noteworthy contributions of the department of English under the guidance of Professor Davis has been the inauguration of a course of lectures upon literary themes, prepared in general by members of the staff. This course, which is still maintained (1939), is not only of cultural value to the students, faculty members, and the public in general, but is an important stimulus to study, and an avenue of expression and public contact for the members of the staff of professorial rank. In a subject such as English in which the library is the laboratory, it is easy for a class-burdened teacher to get into more or less of a rut from which to a certain extent he may be redeemed by stimulating extra-curricular professional work.

Only Professors Davis, Conover, and Rice remain on the staff of the department of English from the Waters administration, but more than ordinary success was met by Professors Searson and Davis in providing additional teachers of diverse types, tastes, and abilities, and, hence, spheres of usefulness. Space limits forbid any attempt at individual characterization of them, but those ranking as assistant professors or higher, and who remain (1939) on the staff are Messrs. Noble W. Rockey, 1921, Charles W. Matthews, 1920, Jacob O. Faulkner, 1922, and James P. Callahan, 1924; Misses Anna M. Sturmer, 1920, Helen E. Elcock, 1920, Annabel A. Garvey, 1920, Nellie Aberle, 1921, and Myra E. Scott, 1928; and Mrs. Harriet S. Parker, 1924. Most of these have shown commendable zeal and scholarship in advanced lines of study.

Don L. Burk was employed as an instructor in English, March 25, 1916, and was advanced to be an assistant professor in 1917. His special field was argumentation and debate, and oral English. His death from influenza, December 16, 1918, deprived the College of an able and attractive teacher who had given promise of a brilliant career.

Hugh E. Rosson was employed as an associate professor of English, and in that capacity served as debate coach, from December 15, 1921, to June 30, 1923. He resigned at the end of the summer

session, August 3, and his leaving at that time was a matter of regret.

As mentioned elsewhere, the department of history and civics performed an unusual service with the Students' Army Training Corps in the presentation, to more than 1,200 men, of a course setting out the aims of the government in the prosecution of the war, and in post-war policies. This was during the fall of 1918. Within this period the department suffered a heavy loss in the death of Associate Professor Raymond G. Taylor, who was taken by pneumonia following influenza, October 14, 1918. Professor Taylor was a talented young man whose value to the College was just coming into more complete demonstration and recognition. He was especially fortunate in his contacts with students.

Arthur F. Peine was appointed assistant professor of history and civics in the place of Prof. R. G. Taylor, effective September 1, 1919. He had served as assistant professor of history in 1916-17 while Professor Taylor was on leave of absence, and following this had been in the national army. He was a most competent teacher, and remained until May 31, 1926, when he resigned to assume the executive responsibility for an important business.

Important additions to the staff in history made within this period were Miss Inez E. Alsop, an excellent teacher who came in 1923, and is now an assistant professor, and Charles M. Correll, who was employed as an assistant professor in 1922, and was advanced to a professorship September 1, 1934. Since July 1, 1927, he has been assistant dean of the Division of General Science. Professor Correll earned this recognition through his systematic mind, interest in scholarship, and broad, tolerant, and judicial attitude.

The personnel of the department of industrial journalism began to take on its present composition. Edgar McCall Amos was employed as instructor in industrial journalism and printing July 1, 1921, and attained the rank of associate professor July 1, 1936. Edgar T. Keith, who began service in 1912, attained the associate professorship in printing July 1, 1920, and the professorship, July 1, 1925. Charles Elkins Rogers, whose work on the *Kansas City Star*, and with soldier students, had brought him into favorable estimation, was made associate professor of industrial journalism July 1, 1919. He succeeded Francis Lawrence Snow, who after serving from 1915, had resigned June 13, 1918. March 31, 1925, the head of the department, Prof. N. A. Crawford, was given leave of absence from May 1, 1925, to June 30, 1926, to become confidential assistant to the secretary of agriculture, W. M. Jardine. Effective May 1, 1925, Mr. Rogers was made professor of industrial journalism and printing, and acting head of the department.

Professor Crawford resigned, and in 1926 Professor Rogers became head of the department, and still (1939) carries that responsibility with grace, tact, and talent.

Within the years of this administration there were added to the department of mathematics persons who remain (1939) as competent members of the staff, Associate Professors Emma Hyde, 1920, Clarence F. Lewis, 1920, and Waldo H. Lyons, 1924; and Assistant Professors William C. Janes, 1922, and Thirza A. Mossman, 1922.

The department of military science and tactics, naturally, was influenced profoundly by the participation of this country in the World War. The limited supply of trained officers required the return of Capt. L. O. Mathews to active service in June, 1917. The department was handled by Major W. B. Wendt, Capt. W. P. J. O'Neill, and Capt. George Sturges, as related elsewhere, until the detail of Capt. Lewis C. Davidson, February 19, 1919. He reorganized the infantry unit of the Reserve Officers' Training Corps which had been suspended during the war. This was the second semester, and the enrollment was light as men who had been in the national service, including the Students' Army Training Corps, were given credit for the military work of that semester.

A coast artillery unit and a veterinary unit of the Reserve Officers' Training Corps were organized the first semester, 1920-21. These were open only to students in the Division of Engineering and the Division of Veterinary Medicine, respectively.

Captain Frederick B. Terrill became professor of military science and tactics and commandant of cadets September 1, 1919, Capt. L. C. Davidson remaining as associate professor. They were both transferred June 30, 1923. In the meantime Captain Terrill had been promoted to be a major. His successor, July 1, was Major Charles A. Chapman, who had been with the department since September 1, 1920, in direct charge of the coast artillery unit. Lieutenant Colonel Fred W. Bugbee was detailed to be head of this department from August 13, 1924, and served into the next administration.

Under the unremitting care of Prof. Arthur E. Westbrook, the department of music advanced materially in recognition as a center of artistic cultural influence. Distinguished musicians were brought here from out of the state, and series of musical and dramatic entertainments were presented with the cooperation of the staff of the department of public speaking and others. The increase in the number of students and teachers made it necessary to provide additional quarters by the rental of residences off the campus but conveniently near. A four-year curriculum in music, and a two-year

curriculum in public school music, had been gradually developed. The staff had increased from eight to sixteen members, among these being Assistant Professor Elsie Harriet Smith, 1917, and Instructors Katherine Kimmel, 1917, Arnold L. Lovejoy, 1919, and Harold Parker Wheeler, 1919.

With such a record of success, President Jardine in April, 1921, was visibly disturbed by the resignations of Professor Westbrook, Mr. Lovejoy, Miss Bess Curry, and Mr. Raymond B. Williams from the music faculty. Professor Westbrook resigned in order to take charge of the Dunbar American School of Opera at Chicago. Soon after, he became director of the conservatory of music in Illinois Wesleyan University, where he continued his successful career. Professor Westbrook took Mr. Lovejoy with him, and the College thus lost a brilliant musical personality. A year later Miss Kimmel resigned to become Mrs. Westbrook, and the College lost an excellent teacher with a lovely contralto voice.

The dean and the president made a widely extended search for a successor to Professor Westbrook, and were fortunate in obtaining Prof. Ira Pratt, who entered upon his duties as head of the department June 2, 1921. His cordial personality and the generous public use of his fine baritone voice soon won him an enviable popularity which he maintained throughout this administration. Mr. William Lindquist was appointed assistant professor of music effective September 1, 1921. Unfortunately he resigned this appointment May 31, 1923. Leslie R. Putnam was appointed to succeed him September 1. To take special charge of instruction in public school music, Miss Ruth Hartman was appointed an assistant professor of music from June 1, 1924, and continues to render effective service (1939).

An emergency which afforded an opportunity for a manifestation of the promptness and resourcefulness of President Jardine arose when Prof. Z. G. Clevenger, head of the department of physical education and director of athletics, with no warning, handed in his resignation shortly before the opening of the fall term. It became effective September 15, 1920.

The resignation of Assistant Professor Adolph G. Schulz, assistant coach of athletics, had been presented in January, and accepted effective May 31, 1920, and Mr. Charles W. Bachman had been elected head coach of athletics and assistant professor of physical education, effective September 1. Assistant Professor Herbert A. Lorenz, who had handled the theoretical instruction in physical education and the work in the gymnasium the preceding year, resigned before the opening of the school year, and, effective Sep-

tember 1, Mr. Ervin A. Knoth became his successor in duties and rank, and served through this administration.

Although Michael F. Ahearn came to the college in 1904, as foreman of the greenhouse, and had been professor of landscape gardening for five years, he had continued to maintain his early interest in athletics, and was a prominent member of the athletic board of the College. He was in Colorado on vacation when Professor Clevenger's resignation was received. President Jardine telegraphed him, asking that he return at once for consultation on the situation. In the meantime interested alumni urged the appointment of Professor Ahearn himself to be Professor Clevenger's successor. President Jardine readily adopted that view and succeeded in getting the assent of Professor Ahearn.

Professor Ahearn has continued to head the work in physical education and athletics, and was never stronger in student, faculty, and public support than he is now (1939). He is a splendid example of men who foster intercollegiate athletics, and at the same time demand adequate attendance to academic studies; who are bold contenders, good losers, and modest winners; to whom games are means of recreation, not channels for the display of brutality, trickery, egotism, resentment, jealousy, or revenge; who do not overestimate the importance of winning, fully realizing that if one wins another must lose, and that it is not best for one to win all the time; that the essential thing is not victory but "how did you play the game?"

In this department during this administration two other men of professorial rank were appointed and remained through the period or longer, viz., Charles W. Corsaut, September 1, 1923, who remained until 1933 giving excellent service; and Frank P. Root, September 1, 1924, who was an active and efficient member of the staff until June, 1939.

In the headship of the part of the staff in charge of physical education for women, the department was less fortunate in respect to continuity of service. At the beginning of this administration Miss Ethel Loring had had this responsibility, from September 1, 1917, and she continued to June 30, 1919. She was succeeded by Miss Edith Lorraine Bond, who served two years in this capacity and, September 1, 1921, was followed by Miss Louise Tausche. After two years Miss Ruth Morris succeeded Miss Tausche, September 1, 1923, and she remained to 1928. Most of these estimable young women served as assistants in the department for one or more years before advancement to the head position.

The staff of the department of public speaking suffered vicissitudes covering several years. Dr. James Gordon Emerson had been

given charge of it September 1, 1915, and had conducted its work with outstanding ability which was recognized by his promotion from the rank of instructor to that of assistant professor September 1, 1916. He continued to January 5, 1918, when he was directed to report to an officers' training school at Des Moines, Iowa. He left with the customary promise of reinstatement after the war, in fulfilment of which he resumed his position with the rank of professor September 1, 1919. He served to February 15, 1921, when, on account of ill health, he was given leave of absence for the remainder of the year. As recovery had not been effected at that time, his leave was extended to the end of the year 1921-22.

In the meantime Odis H. Burns was given a temporary appointment effective January 5, 1918, which was extended to the end of the year 1918-19. At that time he was transferred to the department of English and served as debate coach until his resignation November 15, 1921.

Dr. Howard Templeton Hill was appointed assistant professor of public speaking, October 1, 1920, and promoted to be associate professor, January 1, 1921, and professor and acting head of the department, July 1, 1921. By July 1, 1922, it had become evident that Doctor Emerson's health would not permit his return at any time within the near future, and Doctor Hill was made head of the department, and still retains that position (1939). At that date, also, Mr. Burns returned as associate professor of public speaking and served through the college year 1922-23.

It is probably impossible to speak in too high commendation of the success of Doctor Hill in the choice of personnel for this department and in its general administration. Public estimate of him personally is shown by continuous demand for his services as presiding officer, toastmaster, or public speaker. His fine speaking voice, clean humor, and attractive presentation of some serious message account for this satisfying career.

In September, 1923, following the resignation of Professor Rosson, the coaching of debate was transferred from the department of English to that of public speaking, and the latter department thus assumed its present (1939) pattern as the channel for College instruction in oratory, extempore speech, oral interpretation, dramatics, and debate.

Harrison Boyd Summers came as associate professor of public speaking, with special responsibility for instruction in debate, September 1, 1923, and has continued in service to the present date (1939). His success in serious purpose is shown by the performance of Kansas State debaters, and by his promotion to the rank of professor in 1930, and becoming a doctor of philosophy in 1931. Henry

A. Shinn was also appointed as an associate professor September 1, 1923, and served with high credit into the next administration.

DIVISION OF HOME ECONOMICS

The Division of Home Economics exhibited notable growth in rank and influence during this administration. Instruction in human nutrition was transferred to it from the department of chemistry. This placed in the Division a fundamental subject, rigorous in its academic demands, about and upon which serious study of other courses in the Division might be organized, and thus a consistent curriculum developed with much of the responsibility for it within the Division. The dean, Dr. Helen Bishop Thompson, took over the instruction in nutrition, a subject to which for many years she had given special attention, including study at Yale University under Dr. Lafayette B. Mendel.

In the organization of the Division the departments were renamed so as to correspond better with current usage, and the old department of domestic science divided in a general way into two departments, food economics and nutrition, and household economics. The department of domestic art became clothing and textiles, and home art, applied art.

A major objective with Dean Thompson was an elevation in the standards of preparation for members of the staff. This required a higher scale of salaries. She believes that other things being equal, women should receive as generous pay as men. So stated, most thinking persons would agree with her, the "catch" in the statement being the difficulty of ascertaining the equality or the equivalence of the "other things."

Dean Thompson succeeded to a measurable extent in obtaining greater increases of salaries for positions in her Division than were allowed in others, within this period of general increase of salaries. As opportunity occurred, women of more extensive educational attainments were employed, some having doctor of philosophy degrees, others with credits toward that goal.

Groups of electives were planned to provide training needed for young women in several occupations. New courses were added and others reorganized. The textile laboratory was equipped. Experiments in nutrition were conducted in which small animals were used. A child welfare clinic was organized by Professor Leazenby, and this received the approval shown by public patronage. A five-year curriculum in home economics and nursing was instituted in 1921.

The dean conducted research herself, and encouraged it in others of the staff, and in 1921-22 the Bureau of Research in Home

Economics was organized. Its field as stated in the catalogue included child welfare, clothing and textiles, food economics, household administration, institutional administration, human nutrition, and dietetics. Eighteen research projects then in progress were listed.

Among the important additions to the personnel was Dr. L. Jean Bogert, who succeeded Prof. Margaret H. Haggart, September 1, 1919. She remained only three years but stamped the influence of her ability upon the department of food economics and nutrition. Miss Martha S. Pittman was employed at the same time in this department, and by successive promotions advanced to the headship of the department in 1923 where she serves (1939) with poise, intelligence, and all-round acceptability. In 1930 the University of Chicago conferred upon her the degree doctor of philosophy.

Miss Hildegard Kneeland was a third woman who came September 1, 1919, and contributed strength to the Division in an unusual degree. She was head of the department of household economics and brought attainments in the general field of economics and sociology that added to the strength of her background. She was a valuable member of the faculty in general, and left permanent accomplishments. She was on leave of absence 1922-23, and did not return, but took an important position in the bureau of home economics in the United States Department of Agriculture. The successor of Professor Kneeland was Prof. Amy Jane Leazenby, who served the department ably until her resignation, May 31, 1926. She had been a member of the staff from September 1, 1920.

One of the most fortunate appointments of this period was that of Dr. Martha M. Kramer, who became associate professor of food economics and nutrition September 1, 1922, to succeed Professor Pittman, promoted. Doctor Kramer became a full professor in 1925 and has contributed much to the Division and the College by successful teaching and research. She went to China on sabbatic leave of absence, 1937-38, and resigned in 1939 to continue work in that country.

On the resignation of Prof. Bessie W. Birdsall, head of the department of clothing and textiles, May 31, 1920, Miss Louise P. Glanton was appointed professor and head of the department, effective September 1, 1920. She administered the department until May 31, 1924, when she was granted leave of absence for the next year and did not return. Miss Lilian C. W. Baker succeeded her September 1, 1924, on a one-year appointment which became permanent, and she remained until May 31, 1931, when she was granted leave of absence and did not return.

Among the teachers of this period may be mentioned Miss Ina F. Cowles, who began her connection with the work in clothing and textiles in 1902, as an assistant, and in 1918 attained the rank of associate professor of clothing and textiles. Professor Cowles still performs (1939) the duties of this position with taste and discrimination.

Miss Louise H. Everhardy began service as assistant in applied art September 1, 1919, and now (1939) as associate professor of art continues to exemplify consistent and increasing competence in her profession.

THE CAFETERIA

One of the chief items of progress in the Division of Home Economics was the erection of a building for use in more adequate instruction in institutional management. The department of domestic science, October 5, 1915, under the immediate direction of Miss Nola Treat, 1915-1917, had added to its other opportunities for obtaining meals the service of a modern cafeteria. This had been operated so acceptably in very restricted quarters that the need of much ampler space was recognized, and an appropriation sought and obtained which provided for a building especially for this work.

This building was occupied November 28, 1922. It was planned to provide facilities for cafeteria, tearoom, luncheon, dinner, and banquet services.

While these functions are of great convenience to students, faculty members, and the outside public, the purpose of the organization is provision of laboratory work for students who are being trained in the art, science, and business of conducting such enterprises. Patrons upon which the students may practice are necessary, and to insure patronage, satisfaction as to food, service, and conditions is essential.

Within this period the immediate direction of the cafeteria and cognate services was successively the responsibility of Miss Flora S. Monroe, 1917-1919; Miss Mary W. Ward, 1919-1920; Mrs. Eliza-



MARGARET M. JUSTIN
Dean, Division of Home Economics,
1923—

beth H. Baldwin, 1920-1921; Miss Effie May Carp, 1921-1924; and Miss Wilhelmina Bates, 1924-1926.

A NEW DEAN

Doctor Thompson resigned her deanship of the Division of Home Economics June 30, 1923, and became head of the work in home economics in the Southern Branch of the University of California, which by considerable development became the University of California at Los Angeles. She was employed to organize this work on a permanent basis and still retains her directing connection with the department (1939).

Miss Margaret M. Justin, like Doctor Thompson, a doctor of philosophy from Yale University, was chosen to succeed Dean Thompson and entered upon her duties July 1, 1923. During the remainder of the administration of President Jardine she conducted the Division of Home Economics conservatively, under the organization which she found, and with little change in courses or personnel. During these two years she acquired grasp of the situation and confidence in respect to policy, and since then during the administration of President Farrell has achieved distinct success in channels which are noted later.

DIVISION OF VETERINARY MEDICINE

THE KANSAS CITY VETERINARY COLLEGE IS TRANSFERRED

President Jardine had scarcely taken office before an unusual and important proposal came up for action. The Kansas City (Mo.) Veterinary College, after a creditable career extending over many years, decided that in consideration of the development of veterinary colleges in state universities and elsewhere offering curricula based on standard college entrance requirements, it would be better for it to close. It proposed to transfer its students to this College on as favorable terms as possible and to donate to it a valuable museum of specimens illustrating pathological conditions.

Dr. R. R. Dykstra, Dean E. L. Holton, and Vice President J. T. Willard were appointed a committee of the Council of Deans to draw up suitable recommendations to the Board of Administration leading to the taking over of the Kansas City Veterinary College. After all persons concerned were consulted, a plan was readily agreed upon, the essential points of which were that this College, in accepting the good will and academic records of the Kansas City Veterinary College, engaged to preserve the records, and to respond to requests for information concerning graduates and former students of the Kansas City Veterinary College, and, whenever it prints lists of its own alumni, to print lists of the alumni of the

Kansas City Veterinary College; to receive as junior students all high school graduates who had done satisfactory freshman and sophomore work, and to accord sophomore standing to all high school graduates who had completed satisfactorily the full work of the freshman year of the Kansas City Veterinary College; and to facilitate in all ways consistent with the standard requirements for graduation at this College graduation with the degree doctor of veterinary medicine of any student of the Kansas City Veterinary College.

The arrangements for taking over the students of this college were approved by the Board of Administration, June 28, 1918, and the transfer was made the next September with the special assistance of Dr. A. T. Kinsley, dean of the faculty of Kansas City Veterinary College.

THE DEPARTMENT OF VETERINARY MEDICINE
BECOMES A DIVISION OF THE COLLEGE

An important step in the progress of the College was made when the department of veterinary medicine was separated from



R. R. DYKSTRA

Veterinary medicine and surgery, 1911
— Dean, Division of Veterinary Medicine, 1919—.

the Division of Agriculture and given the status of a Division. The exact date of this action seems not to be a matter of record, but it became effective July 1, 1919, and had been assumed in the compilation of the budget approved May 12, and was probably included in the plans for the advancement of the veterinary work at the time that Ralph R. Dykstra, professor of surgery, was made professor of veterinary medicine to succeed Dr. F. S. Schoenleber, who resigned March 1, 1917. Doctor Dykstra's promotion was effective March 1, 1919.

In the organization of the Division of Veterinary Medicine, the departments of anatomy and physiology, pathology, and surgery and medicine were created, headed by Doctors Burt, Lienhardt, and Dykstra, respectively. Dr. Leonard W. Goss, who came as assistant in veterinary medicine in 1905, and by successive

promotions had become professor of pathology December 1, 1913, resigned June 30, 1919, and the College lost the service of an able and genial man.

Doctor Dykstra is still (1939) dean of the Division, and, by his educational ideals, professional standing, attention to details as well as major matters, efficiency, and personality, has built up a closely knit organization, and created a veterinary school of the highest standing. He maintains contact with all the graduates in veterinary medicine from this College, and through them knowledge of our facilities for professional instruction is spread over the country. Since 1936 it has been necessary to limit admission to the curriculum to 200 students.

In 1919 Doctors Edwin J. Frick, W. M. McLeod, and Charles H. Kitselman were added to the staff of this Division. They now (1939) are professors in the departments of surgery and medicine, anatomy and physiology, and pathology, respectively, and Doctor Frick heads his department.

The possibility of giving adequate instruction in veterinary medicine and surgery was greatly increased by the provision of a commodious veterinary hospital in 1923. This building is equipped for housing sick animals of all species, and is provided with operating rooms, an hydraulic elevator, large and small operating tables, laboratories for diagnosis, etc.

DIVISION OF COLLEGE EXTENSION

The Division of Extension at the beginning of this administration was organized in eight departments: institutes and extension schools, county-agent work, boys' and girls' club work, home economics, emergency home demonstration-agent work, drainage and irrigation engineering, rural service, and home-study service, each with its own head and staff. These had been gradually developed from the department of farmers' institutes established in 1906, and the four departments composing the newly established Division of College Extension in 1912. The department of rural service was discontinued June 30, 1922, and the department of emergency home demonstration work dropped the word "emergency" from its name in 1919, and in 1936 was merged with the home economics department.

The following presentation shows the heads of the several departments during this period. As there have been few changes since 1925, these are also included for convenience, thus showing the executive responsibility to 1939 in the Farrell administration. Dean.—E. C. Johnson, 1915 to 1918; H. Umberger, 1919 to—. Institutes and Extension Schools.—A. C. Hartenbower, 1917 to

1919; T. J. Talbert, 1919 to 1922; L. C. Williams, 1924 to——.
County Agent Work.—H. Umberger, 1917 to 1919; Karl Knaus,
1920 to 1923; H. Umberger, 1923 to 1937.

Home Economics.—Mary W. McFarlane, 1918 to 1922; Nina B.
Crigler, 1922-23; Amy Kelly, 1923-24; L. Maude Finley,
1924-25; Amy Kelly, 1925 to 1936; Georgiana H. Smurth-
waite, 1937 to——.

Home Demonstration Work.—Frances L. Brown, 1917 to 1921;
Nina B. Crigler, 1921 to 1923; Amy Kelly, 1923 to 1936. Com-
bined with home economics, 1936.

Boys' and Girls' Clubs.—Otis E. Hall, 1914 to 1920; R. W. Mor-
rish, 1920 to 1925; M. H. Coe, 1925 to——.

Rural Engineering.—H. B. Walker, 1910-1921; Mark Havenhill,
1921 to 1924; Walter G. Ward, 1925 to——.

Rural Service.—Walter Burr, 1914 to 1920. No successor.

Home Study Service.—M. G.
Burton, 1915 to 1918; V. L.
Strickland, 1918 to 1922;
George A. Gemmell, 1922
to——.

Especial note should be made
of the change in deans which
took place January 1, 1919. At
that date H. Umberger was
made acting dean, and July 1,
1919, he became dean. The pe-
riod covered by this adminis-
tration was marked by great
growth in this Division, most of
which was under the guidance
of Dean Umberger, whose duties
have continued to grow in re-
sponsibility and have been ably
performed.

Of other members of the
staff whose service began within
this period and who are still in
the Division, or were for a sig-



H. J. UMBERGER

Cooperative Experiments, 1911-12; Dem-
onstrations, County agent work, Farmers'
Institutes, 1915-1937. Dean, Division of
College Extension, 1919——.

nificant length of time, the following may be named without preju-
dice against others.

Mr. Harry C. Baird was appointed agricultural agent for Ford
County, effective February 10, 1920, and has been a district super-
visor since January 1, 1934.

Miss Ellen M. Batchelor was appointed emergency home dem-

onstration agent for Wyandotte County, from September 24, 1917. She has been a district home demonstration leader since 1931.

Miss Ada G. Billings, since July 1, 1927, associate professor of history and government in this Division, began her service as an instructor September 1, 1921.

Mr. Frank O. Blecha became agricultural agent for Shawnee County, January 10, 1919, and has been a district agricultural agent since December 1, 1923.

Mr. Ira N. Chapman became the Leavenworth County agent in 1916. After July 1, 1925, he was associate professor of agricultural economics in the Division of College Extension. He was given leave of absence from July 1, 1935, to June 30, 1936, and did not return to the institution.

Mr. A. L. Clapp was appointed assistant county agent leader, September 1, 1920. He had been employed by the College previously in two different positions. August 1, 1931, he was transferred to the department of agronomy, Division of Agriculture, and placed in charge of cooperative experiments, and now has the rank of associate professor.

Mr. Maynard H. Coe became instructor in junior extension May 10, 1922. He has done most effective work as a club leader and has been state club leader with the rank of professor since July 1, 1927.

Miss Maude E. Deely, February 12, 1923, became home demonstration agent for Clay County, and a district home demonstration leader, July 1, 1937. She resigned May 15, 1939.

Mr. Carl G. Elling was appointed district demonstration agent for southeastern Kansas, effective October 1, 1914, and became specialist in animal husbandry, October 1, 1918. Mr. Elling had been previously employed by the College, and had also held two important positions in Cuba. Since February 15, 1921, he has had the rank of associate professor of animal husbandry.

Mr. Beatty H. Fleenor became assistant professor of education in the department of home study September 1, 1923. His excellence of service was recognized by giving him the rank of professor July 1, 1927.

Mr. John V. Hepler became agricultural agent for Washington County, January 3, 1921, and was made a district agricultural agent March 15, 1930, with the rank of assistant professor.

Mr. Clarence R. Jaccard became agricultural agent for Coffey County, January 1, 1922. He had been forest nurseryman for three years at the Fort Hays branch experiment station. Since July 10, 1936, he has been assistant professor of agricultural economics in the Division of College Extension.

Miss Amy Kelly was appointed state home demonstration leader with the rank of professor, effective November 17, 1923, and was also placed in charge of the specialists in home economics for 1923-24 and continuously from 1925. She continued her highly effective service to February 15, 1936, when she accepted a similar position in the University of Missouri.

Mr. Edward G. Kelly was employed as a specialist in entomology from April 15, 1918. Since July 1, 1922, he has had the rank of professor of entomology in the Division.

Mr. Louis M. Knight was made agricultural agent for Gray County effective February 1, 1923, and with intermediate promotions became a district agent January 15, 1937, and assistant professor of agricultural extension. He resigned March 20, 1938.

Mr. Edward H. Leker became agricultural agent for Jackson County, August 12, 1918, and from October 1, 1929, to April 24, 1936, he was assistant professor of plant pathology in the Division. He resigned to become executive secretary of the state agricultural conservation committee.

Mr. James W. Linn became instructor in dairy husbandry May 1, 1924, in succession to Vernon M. Williams. He is still in the service and has had the rank of associate professor since July 1, 1927.

Dr. John W. Lumb was made instructor in veterinary medicine in the Division of College Extension effective July 1, 1924, and was advanced to the rank of professor July 1, 1937.

Miss W. Pearl Martin, now instructor in home health and sanitation, was appointed to be a specialist in home nursing from June 15, 1919.

Mr. Floyd Pattison was appointed specialist in industrial subjects in the department of home study effective December 15, 1919. January 1, 1920, he was made assistant professor of steam and gas engineering, and since July 1, 1927, he has been professor of mechanical engineering in the same department. Mr. Pattison had experience from 1913 to 1917 in the Division of Engineering.

Mr. Mott L. Robinson was made agricultural agent for McPherson County, August 1, 1923, and became a district supervisor July 6, 1934.

Mr. Albert J. Schoth was appointed instructor in junior extension, boys' and girls' club work, August 10, 1921. He was made assistant professor and assistant state club leader from October 15, 1935, to July 31, 1936, when he resigned.

Miss Clara Siem, April 1, 1920, succeeded Miss Belle Steele as financial secretary for the Division, and through her accuracy, memory, and courtesy has made herself almost indispensable.

Miss Georgiana H. Smurthwaite became instructor in foods

and nutrition, Division of College Extension, December 12, 1924. Since February 1, 1937, she has been state home demonstration leader and had the rank of professor.

Mr. A. F. Turner was employed in 1917 as assistant county agent leader and became assistant state leader of county agents January 1, 1920. He has been an associate professor in the Division since February 15, 1921, and field agent since 1924.

Mr. Walter G. Ward began as an associate professor of rural engineering, April 1, 1920, and January 20, 1925, succeeded Mark Havenhill as head of the department.

Mr. Luther E. Willoughby began service in the Division as an emergency demonstration agent in Rush County, August 16, 1917. Since January 1, 1927, he has been associate professor of farm crops, Division of College Extension.

Inspection of current catalogues will disclose the names of more recently appointed officers, some of whom serve in important posts. The large number in the Division makes it impracticable to name all, or even to carry out a just selection for notice.

EXPANSION DURING THE WAR

The extension work expanded very much during this period, being influenced largely by the government program for agriculture as related to national needs during the war. April 1, 1917, there were seventeen counties in which farm bureaus and agricultural agents were conducting work in connection with the College. Early in that month Congress initiated legislation to provide an emergency fund for the extension of agricultural agent work to every county in the United States. This became available the next August. By January 1, 1918, the force consisted of H. Umberger, county agent leader, four assistant leaders, two district agents, 22 county agents, nine assistant county agents, and 27 emergency demonstration agents. Of the last, three were employed in the State at large, 13 had two-county districts, and 11 single counties. The total number was 65.

With the ending of the war these agents were gradually reduced in number, and by 1920 no emergency agents remained, but the number of county agents had increased to 42. At the close of this administration in 1925 there were 59 county agricultural agents, three district agents, and one field agent.

The extension work in home economics paralleled to a considerable extent the agricultural work in extent. In the spring of 1917, in addition to the director and her secretary, there were seven specialists in the various fields of work in home economics. By the spring of 1918 the work had been reorganized with reference to

home life as influenced by the war. Extension schools were organized which gave definite courses of instruction one week in length, and five specialists were employed in the work.

The home economics field was divided and a special department of emergency home demonstration agent work formed. By the spring of 1918, Miss Frances L. Brown as leader was in charge of 21 assistants. The number increased slightly the next year, but by 1920 there were only the leader and seven assistant demonstration agents, and these had lost the characterization of "emergency." At the end of this administration, 1925, there were 15 such agents besides the leader. The regular home economics work employed a leader and seven specialists in five areas of the field.

The force employed in the department of institutes and extension schools numbered 18 in 1917, and with some fluctuations remained about the same, but in 1925 there were 21 listed in that work. These handled the subjects: crops, soils, animal husbandry, swine and baby beef production, dairy husbandry, poultry husbandry, veterinary medicine, entomology, horticulture, field and garden crops, plant pathology, farm management, marketing, and rodent control.

The work in rural engineering was continued at about the same pace. The establishment of the State Highway Commission at Topeka in 1917 automatically reduced at that time some of the channels of service previously used by this department.

Study by correspondence was promoted with vigor, and the staff of the department enlarged somewhat.

The work with clubs of boys and girls continued with constant interest. Meetings of representatives of these clubs were held in connection with the other meetings of Farm and Home Week, in the winter, but in 1923 the annual round-up was changed to the spring. They are now held in May or June each year.

The four-leaf clover insignia came into general use with the clubs for boys and girls, the four leaves on one stem being taken to represent the importance and interdependence of development of head, hands, heart, and health. These organizations were designated as 4-H clubs in the college catalogue for the first time in the issue for 1926-27.

FEDERAL FUNDS

During the World War, Congress made emergency appropriations for extension work with special reference to food production and conservation and economic utilization of farm products. These appropriations ceased in 1919, but there was such a great demand for continuation of much of the work that had been started that

Congress made an appropriation effective July 1, 1919, known as "the supplementary Federal Smith-Lever appropriation." This was continued annually to 1939, and required matching of appropriations by the State, or organizations within the State. It was allocated to the states on the plan that is used with the regular Smith-Lever appropriation.

For the year 1924-25 there were available from the Federal Government for extension work: Smith-Lever fund, \$10,000 unmatched, \$91,842 matched, and supplementary Smith-Lever fund, \$29,121 matched. The Smith-Lever fund was not completely matched by a State appropriation, only \$82,500 being allowed, but the remainder, \$9,342, was matched by county funds. The supplementary Federal Smith-Lever funds were also matched by county funds, \$29,121. The Division was allowed \$31,600 from general College funds. The total amount thus provided for the year 1924-25 was \$283,526.

RADIO BROADCASTING BY THE COLLEGE

For some years the view had been held that the entire State might be looked upon as the campus of the College, because of the general penetration of the work of several of its agencies. This situation was notably strengthened by the establishment of the broadcasting station KSAC.

Following tentative and interrupted efforts extending back as far as 1901, the department of physics in 1912, under the provisions of the national radio law, obtained a license for station 9YV. The same year the department, using an aerial stretched from a tower on Denison Hall to one erected about 100 yards north, began daily broadcasts of the weather forecasts. These were in the Morse code by so-called wireless telegraphy. Farm boys and others with crystal detector sets, who had learned enough of the code, could make use of the broadcasts. They were received at points as distant as Wichita, Winfield, and Bennington, Kansas. This is believed to have been the first broadcasting in the country of weather reports by radio on a fixed schedule.

With the entry of this country into the World War this station was ordered dismantled, but laboratory work was maintained, and 120 men in the signal corps of the army were given training in the department, under the instruction of Z. R. Hook, W. H. McClelland, and E. A. Stewart, members of the department staff. In 1919 station 9YV was permitted to resume its activity, and daily weather broadcasts were again provided.

In the fall of 1921 Mr. E. R. Lyon came in charge of 9YV. The author is indebted to Professor Lyon, who is still on the staff,

for the early history of the development of broadcasting at the College. Mr. Lyon had had several years of experience with commercial wireless telegraphy, both as an operator and an instructor, including teaching in the United States Naval Radio School at Harvard University during the war. Before long the wireless telegraph station 9YV was converted into the 100-watt radio telephone station WTG, from which the first spoken and musical broadcasts from the College were sent out.

October 23, 1923, the Board of Administration appropriated \$250 to defray the expenses of faculty members who appeared on radio programs broadcast by the *Kansas City Star*.

Improvements in commercial broadcasting apparatus made rapid progress, and the college staff was eager to take advantage of this, but the expense seemed insuperable. Mr. Lyon suggested that the powerful station KFKB at Milford be used for trial broadcasts by remote control through the telephone line from Manhattan. E. R. Lyon with Samuel Pickard and L. C. Williams constituted a trio through whose technical knowledge, faith, and hard work success was won over serious obstacles, early in February, 1924.

A "College of the Air" was opened February 11, 1924, in which an extension radio curriculum was offered consisting of five courses: Monday, poultry; Tuesday, dairy and livestock; Wednesday, crops, truck, and soils; Thursday, agricultural economics; Friday, home economics. Radio fans were invited to register, and on completion of the curriculum, to take an examination which would entitle students to certificates of graduation from the first school of its kind ever conducted. These courses were broadcast over KFKB, Milford, Kansas. The significant value of the topics presented the first week was well adapted to eliciting public approval. Students enrolled from nearly every state in the union and from Canada. Samuel Pickard, extension editor, was in charge of the radio school. He was in general charge of extension information. After President Jardine became secretary of the Department of Agriculture, he called Mr. Pickard to take charge of the radio work of the Department. He has since achieved a distinguished career.

The courses broadcast the winter of 1924 ran ten weeks. Several hundred students were enrolled, and thousands listened without enrolling. Hundreds of letters of commendation were received. President Jardine and Dean Umberger influenced the State Board of Administration so effectively that an appropriation of \$20,000 for the erection of a broadcasting station was announced by Hon. A. B. Carney, chairman of the Board, at the alumni-senior banquet,

May 28, 1924. Construction could not begin at once, and the plan of broadcasting through KFKB was renewed September 15.

A 500-watt Western Electric transmitting set was purchased in July, and two towers 150 feet high were erected west of Nichols Gymnasium. The room on the third floor of the gymnasium in the northwest corner, previously used by the Franklin Literary Society, was equipped as a power room, studio, and reception room. Material was broadcast the latter part of November, the College of the Air being switched from KFKB to KSAC about November 24.

The dedication program of station KSAC, 341 meters wavelength, was presented December 1, 1924, as a feature especially interesting to the alumni. The program opened with ringing of the College bell, a number which brought tears of joy to alumni far and near. A paper, "In the Beginning," was presented by Mrs. Emma Haines Bowen, the only survivor of the first class to be graduated, that of 1867. Many other items made up a program which lasted from 8:00 to 12:00 p. m., and provided speeches, reminiscence, and music in great variety. Many congratulations were received by telephone and telegraph, and these were broadcast to the listening audience. A demonstration was made that the College campus had been extended from California to New York, from Washington to North Carolina, from Texas to Canada, and that a facility had been created that would do much to maintain and consolidate alumni interest.

The Division of Extension has made continuous use of the broadcasting station, and through it practically every aspect of the work of the College has been presented from scientific and technical courses and lectures to entertainment by means of music and dramatics. The station has also been used for broadcasting football games and other athletic contests while in progress. To forestall complications, the Board of Administration, on recommendation of President Jardine, voted September 12, 1924, that only College programs may be broadcast by this station.

The efficiency of the station was greatly improved in 1931 by a complete modernization which progress in radio science and art had made needful, and for which the legislature appropriated \$25,000. The improvement included installation of the Western Electric Company's 1000-watt quartz-crystal-controlled transmitter.

CURRICULUM CHANGES

There were no general revisions of the curricula during this administration. Their content had become practically standard-

ized with reference to the educational field of this College, but changes in any were made from time to time as opportunities for improvement seemed to appear. This has continued to the present. Several new formulations of curricula designed to meet specific needs were adopted. These responded to the demands of students or the vision of members of the faculty.

In February, 1919, three four-year curricula in chemistry were approved: agricultural chemistry, biochemistry, and industrial chemistry. These were formulations which did not require the offering of any additional courses. They were merely systematic arrangements of existing courses that were made to meet special cases. The last has been chosen by such numbers of students that it has been continued to the present (1939); the other two were not offered after 1922.

A three-year curriculum in applied music, leading to a certificate, had been offered since 1916, and the demand for training in music resulted in the gradual addition of professional courses, and in February, 1920, a four-year curriculum leading to a degree in music was adopted by the faculty. This was much strengthened in 1922, and presented in three variations to meet the needs of students of voice, violin, and piano, respectively. The two-year curriculum in public school music, established in 1918, was continued. Completion of its requirements qualified the student to receive a music teacher's State certificate.

The scope of training available to young women was enlarged in 1921 by incorporating into a curriculum in home economics two years of training in a standard hospital. This led to a bachelor's degree in home economics and a diploma in nursing. Five years were required for the work. Two years in Charlotte Swift Hospital, Manhattan, were taken between the second and third years at the College.

The summer of 1921 on the direct initiative of President Jardine a curriculum in rural commerce and business administration was announced. The next year the name was changed to rural commerce. This curriculum was made up of courses that were offered in other curricula, and thus there was no addition at that time to the total number of subjects taught. The purpose of the curriculum was to train young men and women for citizenship and business service in towns and their surrounding rural districts. The curriculum included a minimum of science and mathematics and considerable opportunity for choice in electives, and met ready acceptance by students, 108 enrolling the first year that it was available, 1921-22. The word rural was dropped from the name in 1929. By the use of electives, special phases of commercial study

may be emphasized, and in 1931 more definite recognition was given to one of these by offering the curriculum in commerce and accounting. In 1939 the name of the original curriculum was changed to business administration, and of the special one to business administration and accounting.

A four-year curriculum in chemical engineering was authorized by the Board of Administration, March 6, 1924, with the understanding that the arrangement of a chemical engineering curriculum meant only putting into a definite order subjects already being taught, without incurring additional expense. Such a curriculum was approved by the faculty the next May. The number of students who choose this curriculum amply justifies its establishment.

The organized work of the Division of Engineering was rounded out further by the establishment of the curriculum in landscape architecture in 1924, and architectural engineering in 1925. These were systematic arrangements of subjects for study toward definite objectives, but involving few, if any, courses not already available in other connections.

CREDITS ON ACCOUNT OF WAR SERVICE

One of the matters calling for action at this period was that of graduating students who gave national service, on less than the regular amount of college work. Some colleges gave such students an unwarranted amount of credit, as it seemed to many. The Council of Deans and the faculty consistently refused to regard a curriculum of study as a task to be performed, much of which might be equally as well satisfied by the performance of military duties. It was their view that a four-year curriculum here constitutes preparation for one's occupation in life, and not even a completely adequate preparation. Release from any significant part of such a curriculum thus results in weakening the preparation of the student to meet the competition that is sure to come.

On the other hand, it was recognized that in many cases there would be considerable hardship and handicap in requiring the student to return another semester for a few hours of credit, and that this might more than offset the educational advantage of such return. After some tentative and less fully considered actions, it was finally voted that a student must complete not less than seven eighths of the requirements of his curriculum, which would be allowing a war credit of not more than the work of one semester. This maximum was not regarded as a standard or customary amount of credit which any student who had been in the service might claim, but a limit that might be allowed to some.

April 16, 1917, immediately after the declaration of war, the Council of Deans recommended that senior students who were doing passing work and normally would be graduated in June, "be granted credit for the remainder of the term's work and that their degrees be granted *in absentia*, if they enter military or naval service before the end of the college year."

November 1, 1917, the Deans formulated a plan for allowing credit to a student ordered into service. The credit allowed was one fourth, one half, or three fourths of the subjects in which he was doing passing work, at the end of five, nine, or fourteen weeks, respectively. The dean designated the subjects in which credit was to be allowed. If seven eighths of the requirements for a degree had been fulfilled, he was to be recommended for graduation.

March 7, 1919, the president appointed Deans Farrell, Potter, and Willard to constitute a special committee to consider all requests for credit on account of military service, Dean Farrell being chairman. Its work and recommendations were in accordance with the following action:

The Council voted to defer all credits to be given juniors, sophomores, and freshmen until their senior year, and voted to consider each case individually, basing recommendations for credit on account of military work upon the following points: (a) length and character of military service; (b) scholarship; (c) the effect which military service had on the student's opportunity to continue or to resume his college work; (d) the effort made by the student to complete the regularly required work; (e) no credit greater than one eighth of the requirements for graduation to be allowed on account of military service.

The work of this committee extended over several years, and through the sense of responsibility and the executive ability of its chairman the conditions attending each case were reduced to writing and received careful consideration and consistent action. The students were readily led to adopt the view of the faculty, and little if any dissatisfaction was expressed. In very few cases were more than twelve semester hours of credit allowed.

GRADUATE STUDY

The administration of the graduate work of students in the College was placed on a much better basis by replacing the standing committee of the faculty by a graduate council consisting of seven members, two from the Division of Agriculture, one from the Division of Engineering, two from the Division of General

Science, one from the Division of Home Economics, and one from the Division of Veterinary Medicine. This organization was recommended by a committee of the Council of Deans, and adopted October 23, 1919.

The graduate council appointed by President Jardine consisted of Professors W. A. Lippincott, chairman, L. E. Call, L. E. Conrad, Helen B. Thompson, H. H. King, R. K. Nabours, and J. H. Burt. The reorganization plan provided for the formation of a graduate faculty to consist of all those recommended by department heads and approved by the graduate council as qualified to give graduate instruction. The chairman of the council is chairman of this faculty.

As stated in the catalogue for 1919-20,

The graduate council determines, subject to the authority of the president and the Board of Administration, and in accordance with any general regulations adopted by the graduate faculty, matters of curriculum, admission to graduate study and to candidacy to advanced degrees, and other matters which relate to the proper administration and development of graduate work in the College.

The graduate council took its work quite seriously, holding regular meetings and keeping minutes of its proceedings. One of the most important duties of the council was the formation of the graduate faculty, the body of teachers, courses conducted by whom would be acceptable as part of those which might be used as credits toward an advanced degree. In the application of higher standards for courses offered and teachers approved the council did much to elevate the standards for the master's degree. Registration for graduate study and acceptance as a candidate for the degree were systematized, and procedure in all phases of graduate work made much more definite.

When Doctor Lippincott resigned in 1923, the chairmanship of the graduate council became vacant, and President Jardine appointed Dr. James E. Ackert, of the department of zoology, to fill it. As Doctor Nabours, head of the department of zoology, was already a member of the council, an unbalanced condition was created which was in part corrected in 1925 by the voluntary withdrawal of Doctor Nabours and the appointment of Dr. L. D. Bushnell. This still left the Division of Agriculture with but one member, and gave three to the Division of General Science.

SURVEY BY THE BUREAU OF EDUCATION

An event of some importance at this time was a survey of the Kansas higher institutions of learning made by a commission of

the Bureau of Education of the Department of the Interior. This survey was made at the request of the second State Board of Administration which had inherited a remnant of the old controversy concerning duplication of work at the State educational institutions.

Following correspondence and conference, Dr. John J. Tigert, commissioner of education, appointed members of the survey commission who were approved by the State Board of Administration. The specialist in higher education attached to the Bureau, Dr. George F. Zook, was selected to direct the survey and be chairman of the commission. The other members were: Dr. Lotus D. Coffman, president of the University of Minnesota, and Dr. A. R. Mann, dean of the college of agriculture of Cornell University. The commission also had the assistance of Mr. John C. Christensen, assistant secretary and purchasing agent of the University of Michigan, who made a study of the financial and purchasing organization of the Board of Administration as far as it was related to the educational institutions. Mr. Christensen had been financial secretary for Kansas State College, 1911-1913.

The greater part of the time required for the survey was given by Doctor Zook and Mr. Christensen, the former spending eleven weeks and the latter six weeks. They made several trips to each of the five institutions. Dean Mann spent nearly three weeks in the field, and President Coffman two weeks. The survey began April 1, 1922, and the report of the work was submitted to the Board, November 25, 1922. It was published the next year and covered 160 pages, including a valuable statistical appendix. It was designated as Bulletin, 1923, No. 40 of the bureau of education.

This report cannot be fully summarized here, but it was drawn up on broad lines, and with recognition that established situations are not easily altered and that what might be expensive duplications in small schools lose that quality when the schools are, like the University of Kansas and Kansas State College, so large that rooms and teachers for a given subject are fully employed at both.

A quotation may be submitted as follows:

The commission has studied the situation concerning the exact duplication of work in civil, electrical, and mechanical engineering, and wishes to dismiss at once any suggestion that this duplication should be eliminated.

Enrollments were submitted and the comment continued:

All of the apparatus was being used to its capacity. The classes were with slight exceptions of normal size or over. To accommodate at one institution all the engineering students that one finds at both institutions would mean prac-

tically to double the buildings and equipment. Since the registration in those fields has reached the present number at the two institutions, the question of increased expense to the state is practically negligible.

Note is also made of the working agreement under which rural engineering fields are left to the College and urban features stressed by the University. The development of a large State highway laboratory at the College was forecast.

In respect to architecture the commission expressed the view that in its aspect as a fine art the University was in better position to handle it well, while there was an important rural field which the College might cultivate. Duplication in urban architecture in the two institutions was not approved, since the number of students in architecture must necessarily be small, and the College should leave the urban field to the University.

In respect to music the commission considered that professional music specialists should find their training at the University, though music might properly be taught at the College, but more as a general service subject, and in the curriculum in public-school music.

Journalism was also carefully considered, and the commission approved the sole occupancy by the College of the field of industrial journalism, including agricultural and trade journals, but held that the University should be responsible for all courses leading to general newspaper work.

Courses in the subjects of professional education were being offered by all the State schools. The commission was of the opinion that the chief attention of the normal schools should be given to the preparation of elementary-school teachers in the several phases of their work, in which they had no competitors, and that they should be slow to take on other duties which would draw them away from their main purpose. The commission considered the University to be the natural leader in the preparation of high-school teachers, and that in that work the normal schools could do no more than to share equally with many other colleges of the State.

In a statement bearing directly upon Kansas State College, the commission expressed the view that all teacher training in agriculture would better be left to that institution excepting preparation for very limited instruction, and that it should be the leader in the training of teachers of home economics for secondary schools. The report continued:

In addition, the Agricultural College is prepared to train high-school teachers of science, public-school teachers of music, *** and vocational teachers of agriculture, home economics, and trades and industries.

In respect to instruction in home economics at the several state schools, the commission recognized the priority of the College, and wrote:

On the whole the equipment for courses in home economics at the Agricultural College is good. The commission, however, was impressed with the fact that for the fullest development of this work additional facilities and equipment are very desirable. It is scarcely possible to give a high grade of graduate work under present conditions.

The commission approved offering the young women at the University ample opportunity to prepare themselves for home duties, but recorded its disapproval of the attempt at the University to offer a major in home economics without chemistry as a prerequisite.

Students who are not willing to take courses in general chemistry, qualitative analysis, organic chemistry, and the chemistry of foods as prerequisites to the courses in domestic science should not be allowed to major in this field either in the general or the teacher-training curriculum.

The sphere of the liberal arts and sciences in the University and the College was adequately discussed, and the views presented are so perennially pertinent that a few quotations may be made.

The remarkable development of these technical curricula in recent years has been based very largely on the progress which has been made in the basic sciences underlying these fields of instruction. Engineering, agriculture, and home economics are the diverse applications of mathematics, chemistry, physics, physiology, biochemistry, botany, zoology, and bacteriology to the particular problems raised in each of these major divisions of instruction. For this reason technical educators representing these several divisions are now a unit in holding that the quality and success of instruction in agriculture, engineering, and home economics depends on sound training in the basic sciences.

It becomes apparent therefore that no separate land-grant college can afford to deny to its students the contacts with arts and science subjects which students of agriculture, home economics, and engineering receive at universities such as Missouri, Illinois, and Wisconsin, which include the land-grant colleges.

It is unnecessary to develop extensively the function of the University in the liberal arts and sciences. The work in this field is the very heart and center of the University and

institutions of comparable character *** . The obligation of the University, therefore, in the development of the sciences is inclusive, with certain exceptions, rather than specific as at the Agricultural College. In the realm of the pure sciences there are innumerable fields of research and investigation, in many instances remotely connected with any known application, which the University and other institutions of similar character are under obligations to promote with vigor and proper encouragement.

In the realm of the liberal arts, where advanced courses and research work are not necessary in the curricula for technical and scientific students at the Agricultural College, the commission holds that it would be unwise to permit duplication in advanced courses and research work. For this reason it would seem that the present practice of not granting the bachelor of arts or the master of arts degree at the Agricultural College should be adhered to.

This part of the report concludes with the following paragraph:

In this discussion of the function of the University and the Agricultural College, respectively, with respect to liberal arts and sciences, the commission has endeavored to take a generous attitude toward the Agricultural College. It is, however, not the commission's intention to recognize anything like equal obligations in this field at the two institutions. The leadership of the University in the general field should be unquestioned, and in the efforts which the State should make for thorough and extended instruction and research in liberal arts and sciences the University should receive the same primary consideration that the Agricultural College enjoys, for example, in the field of home economics.

The report of this commission is a remarkably dispassionate and able discussion of a problem that was and is very complex, not only in its essential nature, but because of the added difficulties caused by the uncoordinated growth of the educational system of the State. It merits even at this time serious study by boards and administrators, but it is doubtful if it has had much influence upon legislation, this having pursued its usual opportunistic course.

PRESIDENT COOLIDGE TAKES PRESIDENT JARDINE

In the early winter of 1924-25 rumors were heard that President Coolidge might appoint President Jardine to his cabinet as

secretary of the Department of Agriculture. In earlier years President Jardine had been on the staff of the Department, and his published opposition to the McNary-Haugen bill was in accord with the views of President Coolidge. The lack of harmony between Herbert Hoover, secretary of the Department of Commerce, and Henry C. Wallace, secretary of the Department of Agriculture, had been notorious, and the death of Secretary Wallace made it easy to appoint a successor who would be more cooperative.

President Jardine spent a month in Washington, D. C., as a member of an agricultural commission which studied the difficulties in the condition of agriculture, and he testified on that subject before the senate agricultural committee regarding recommendations of the commission. His appointment followed soon after. He was not eager to go but considered that the wish of President Coolidge could not be disregarded.

Doctor Jardine was given indefinite leave of absence by the Board of Administration in order that he might accept the secretaryship of agriculture, and Dean Francis D. Farrell was appointed to be acting president, effective March 1, 1925. On May 5 of the same year Acting President Farrell was made president, Secretary Jardine having cleared the way by resigning the presidency.

February 25, 1925, was largely devoted to farewell exercises in honor of the retiring president. A special review of the Reserve Officers' Training Corps under the command of Col. F. W. Bugbee took place early in the afternoon. This was followed by a College assembly program in connection with which President Jardine said goodbye to the students.

In the evening more than a thousand persons sat down to a farewell dinner in Nichols Gymnasium, and listened to a program of music and addresses. An impromptu speech was made by Doctor Waters, former president of the College, and more or less formal addresses by A. B. Carney, vice-chairman of the Board of Administration; Fred Trigg, of the *Kansas City Star*; Fred Voiland, representing Governor Paulen; S. A. Bardwell, president of the Manhattan Chamber of Commerce; J. T. Willard, vice-president of the College; F. D. Farrell, dean of the Division of Agriculture; and Daisy Hoffman Johntz, '00, representing the Alumni Association. The concluding address was by President Jardine. The occasion was one of complete success in the recognition of work well done by Doctor Jardine as president, and the expression of good wishes for him in the administration of his new office.

Doctor Jardine had taken on the duties of the presidency with a good knowledge of conditions throughout the institution acquired during his service since 1910 as a professor, and later as a dean.

He found the College as President Waters left it in perfect running order, and with no major pressing problems requiring attention. The situations that developed during the war and others following were met with decision, and usually by a procedure fully justified by later developments. His genial personality always brought him the friendly cooperation of others, and the progress of the College during his administration will stand comparison with that attained during any other period of the same length in the history of the institution.

Notable growth was made in respect to buildings and equipment, and in land for use of the Agricultural Experiment Station and other purposes. The enrollment of students increased from 2,406 in 1917-18 to 4,031 in 1924-25, and the number of graduates for the same years from 215 to 335.

Doctor Jardine fully met the expectations of his friends in his four years of service as secretary of the United States Department of Agriculture. In 1929 President Hoover appointed him to be minister to Egypt. On his return in 1933 he was at once persuaded by Governor Landon to accept an emergency appointment to be treasurer of the State of Kansas. He held this position from October 2, 1933, to April 2, 1934. He was elected to the presidency of the Municipal University of Wichita, effective March 1, 1934, and has created distinguished success in that position.

CHAPTER X

THE COLLEGE AND THE WORLD WAR

AT the outbreak of the hostilities which developed into the World War, President Waters was in the Orient. He abandoned a trip in China and returned at the first opportunity. The progress of the war affected the College indirectly to some extent through increases in prices. Faculty discussion of the merits of the combatants disclosed various views, individual attitudes being influenced to a certain extent by the ancestry of the disputants. The encroachments of England upon our alleged right to the freedom of the seas, and her violations of the privacy of personal mail, were so irritating that it would have been hard for many months to decide toward which side in the conflict the preponderance of national sympathy went. Students were condemnably indifferent to the issues involved and carried on their social activities as usual.

However, as the war progressed and the rights of neutrals came to be more and more violated by Germany, and accounts of inhuman warfare by the central powers were continually reported, public sentiment gradually crystallized around the conclusion that the safety of our own Government and people required that the United States enter the war on the side of the allies. The country was in no condition to render immediate aid, but after the declaration of war April 6, 1917, preparations began with feverish haste, and national action impinged at once upon the routine of college life here and elsewhere. The value of even the little military training that men in the land-grant colleges had received was in the aggregate inestimable.

It is not the purpose in this history to present at length a brief for or against war as a procedure for settlement of disputes among nations, but all sincere students of the problem should study in the then current periodicals all the factors that molded public opinion to an extent that amounted to a transformation of it. One thing seldom mentioned should not be left unconsidered. The conditions following the war have been and still are so different from those expected in "stopping Germany," that to many it seems that the war was waged in vain. Let such, study the situation as carefully as possible, and decide what would probably have been the result had this country kept out and allowed Germany to win. That was the specter that sent more than 1,200 Kansas State men into a conflict in which at least 52 lost their lives.

STUDENTS AND FACULTY MEMBERS ENLIST

War had scarcely been declared before students began to get excused from College in order to enlist. This College like others gave a bonus in academic credits to such men. Seniors were graduated if they had completed seven eighths of the required work; others were accorded or assured generous treatment. A general draft was expected, but many anticipated it by enlisting in the army. Perhaps some of these were not strong students, but at any rate they were exponents of the force that brought the people almost unanimously to the support of the Government at that time of need.

Soon after the declaration of war the War Department established training camps for officers. One of these opened at Fort Riley, May 8, 1917, and nearly 50 students, former students, and members of the faculty were accepted for training. Their names were published in the *Collegian* for May 11. The faculty men were E. N. Wentworth, H. E. Porter, C. E. Aubel, and Herschel Scott.

Student interest in these training camps was very high, as through them it was possible to capitalize the military and academic training received at the College, and be assigned to more responsible duties in the army than those of an ordinary private soldier.

THE NATIONAL DEFENSE ACT

By the act of Congress of June 3, 1916, a national defense act had been passed which provided for the establishment of a Reserve Officers' Training Corps in civil institutions. No unit had been organized at this College, and, after a rating of distinguished institution for the three successive years immediately preceding, Kansas State receded to an altogether unmentioned rank in 1917.

An infantry unit of the Reserve Officers' Training Corps at the College was authorized by the War Department, November 29, 1917, and was formally established January 29, 1918, with the beginning of the second semester. About 60 men enlisted for the advanced work, and the next summer many of them received a six-weeks' course of training at Fort Sheridan. This camp was attended by six members of the faculty, O. H. Burns, A. H. Hersh, I. V. Iles, J. E. Smith, R. I. Throckmorton, and W. B. Wendt.

Capt. L. O. Mathews, professor of military science and tactics and commandant of cadets, was ordered to join the Forty-Second United States Infantry at Ft. Douglas, Utah, and left June 5, 1917. Edward L. Claeren, commissary sergeant, retired, assistant commandant, was returned to active service as a captain in the quartermasters division, June 13.

Under these circumstances, President Waters placed the mili-

tary department in charge of Major Wylie B. Wendt, assistant professor of applied mechanics, who had had a good deal of military experience in Michigan. He served as acting commandant to October 27, 1917, when Capt. Wm. P. J. O'Neill, retired, was detailed by the War Department to be professor of military science and tactics and commandant of cadets. Major Wendt remained in the department as assistant commandant. Cadet Colonel Fred Carp was also assistant commandant from September 1 to November 27, 1917.

Captain O'Neill continued in command until about September 15, 1918, when he was transferred to Fairmount College, Wichita, to train a section of the Students' Army Training Corps. Capt. George Sturges, who had been at the College since May 12, 1918, in command of the detachment of soldiers who were in mechanical training, was placed in charge of the military department. He continued in this capacity until he was relieved by the detail of Capt. L. C. Davidson, who took charge February 19, 1919.

During his tour of duty, the chief service of Captain Sturges was the organization of the collegiate section of the Students' Army Training Corps, but he was also in charge of students who were taking required military training but were not eligible for enlistment in the Students' Army Training Corps. Throughout his connection with the College, Captain Sturges proved himself a most tactful, cooperative, and capable officer in an unusual and difficult period.

SUPPORTING THE WAR

American enthusiasm, energy, and efficiency expressed themselves in various ways after we entered the war. Financial support was given directly by purchase of different types of government obligations, liberty bonds, war savings bonds, and thrift stamps. Committees were organized and systematic solicitation made of members of the faculty and the student body to promote the sale of these obligations.

The Government used every means to elicit and coordinate the activities of the people through channels which while not military in nature or organization contributed to the military power. In the several states councils of defense were organized. Governor Capper appointed the council for Kansas, and it elected President Waters to be its chairman. He at the earnest solicitation of the committee continued to serve in that capacity throughout the war even though he became a citizen of Missouri, January 1, 1918.

The dean of the Division of Home Economics performed the duties of Federal home economics director for Kansas under the

United States food administration, being appointed to that office in November, 1917, and did a large amount of work in that connection.

An organization of the Red Cross was maintained at the College in connection with which the young women of the student body prepared thousands of standard surgical dressings.

While president of the College, Doctor Jardine made many addresses before meetings of representatives of different lines of agriculture. These were often printed in the *Industrialist* at least in part and remain as witnesses to his versatility and common sense.

FOOD PRODUCTION AND CONSERVATION

The basic necessity for food for the soldiers led to Government action in the interest of food production and conservation. Under the national leadership of Herbert Hoover as food administrator, state organizations were effected. President Waters was appointed food administrator for Kansas, and through the last half of 1917 conducted a vigorous campaign. In this he was assisted by Prof. H. W. Davis, who served as executive secretary. The cooperation of the citizens of the State was obtained, 94 percent of the families formally pledging themselves to assist the Government in its plans to increase and conserve the food supply.

Speaking campaigns were carried on looking to obtaining cheerful compliance from the public with the regulations of the food administrators. In this work Dean Mary Pierce Van Zile, dean of the Division of Home Economics, and other members of the Division gave unstinted service. Meetings were held and many articles published in the *Industrialist* and elsewhere for the purpose of giving public information in this field.

Wheat-flour and meat were deemed to be especially important for military stores, and systematic economy in these on the part of the civil population was developed through the device of "wheatless days" and "meatless days." The home economics faculty published recipes and menus designed to aid in this program through the use of substitutes for wheat and meat.

Conservation was also advocated in the use of textiles, and here too the members of the faculty in the Division of Home Economics gave information concerning substitutes and the remodeling of out-moded apparel.

The members of the faculty of the Division of Agriculture were constantly occupied in speaking or writing in the interest of an increase in the production of food of every kind. At this time was initiated the great extension of the wheat-producing area in the western part of Kansas which in later years produced serious

problems in agriculture, economics, and sociology. The conservation of food extended to the giving of information to millers throughout the Southwest on the prevention of dust explosions in mills. Professors L. A. Fitz and C. O. Swanson gave lectures in that connection.

MECHANICAL TRAINING OF SOLDIERS

Dean A. A. Potter, of the Division of Engineering, gave extended and varied service. Arrangements for technical mechanical training in the College shops were promoted by him. The spring of 1918 groups of 30 men in the military service were brought from Fort Riley in trucks, and given a day's special instruction regarded as of value to them as handlers of trucks and automobiles. They brought materials for the noon meal which were taken by the College cafeteria and converted into an attractive hot lunch with coffee.

From September 1, 1918, to the end of the war, Dean Potter gave most of his time to the War Department and was a supervisor of the mechanical instruction that was being given to detachments of soldiers here and at other engineering colleges in the states of Colorado, Nebraska, Iowa, Minnesota, North Dakota, and South Dakota, and in Kansas City, Missouri.

By the spring of 1918, more than a year after we entered the war, some semblance of possible military effectiveness began to be manifested. As a contribution to the mechanical knowledge that promoted effective service, the College undertook the training of successive groups of drafted men in several mechanical or scientific lines. The first detachment arrived May 16, and consisted of 250 men, who were divided for instruction as follows: 150 to be trained as auto-mechanics, 20 as blacksmiths, 20 as electricians, 20 as radio-operators, 20 as machinists, and 20 as carpenters. This group remained until July 15, when it was succeeded by another of 515 men who were trained until about September 13. A third detachment of 515 men arrived September 19.

When the first detachment came, there were no special buildings available for housing or feeding the men, and they were lodged in the main gymnasium, with two or three rooms on the second floor for reading and recreation.

The cafeteria, under the general supervision of Prof. Margaret H. Haggart, and the immediate direction of Miss Flora Monroe, assisted by Miss Lenore Richards, undertook to feed the soldiers in addition to continuing the service to the students.

The expeditious feeding of more than 500 soldiers was no small undertaking. The meals were consumed in two or three of the

rooms at the west end of the second floor of Kedzie Hall. The food was carried up from the kitchen on the first floor by an elevator which delivered its loads on two sides where it was served to two lines of men. In this way the detachment was fed in 45 minutes. This continued until a mess hall erected by the War Department became available about the middle of August.

STUDENTS' ARMY TRAINING CORPS

A major episode in the service of the College in the World War was the administration of a unit of the Students' Army Training Corps. This corps was organized by the War Department with a view to permitting young men subject to draft to pursue college work while awaiting call, and thus to become more valuable as soldiers, and probably qualified for special service in many cases. There was a suggestion that the men be placed in a deferred classification in respect to liability to call under the draft, but such privilege was never actually offered. Units of the corps were organized in about 500 colleges, and were generally designated as the S. A. T. C.

Preparations for the S. A. T. C. began in early summer, 1918. A conference of army officers and representatives of colleges was held at Fort Sheridan at which many general features were presented and discussed. It was the plan of the War Department to have the college instruction consist largely of studies that would increase the military efficiency of men. A course was provided treating of the objectives of the war, that the men might be better informed in respect to that for which they were fighting. Academic instruction was to be accompanied by a liberal amount of military drill.

STATUS AND PRIVILEGES

Members of the S. A. T. C. were soldiers in the army and as such received rations and clothing and \$30 a month. The War Department also paid their college fees and charges. There was thus considerable incentive to young men to enter college with the idea of joining the S. A. T. C. The corps was not to be organized until October 1, but in anticipation of this students expecting to enter it were assigned subjects with that in view, and were given three hours a day of military drill.

The College had decided the year before to go on a semester instead of a three-term basis for the college year. The War Department planned the work of members of the S. A. T. C. on the basis of twelve-week terms. This discrepancy in schedules led some of the faculty to the opinion that we should remain on the three-

term basis. Many colleges and universities which had been on the semester basis changed to the twelve-week term to meet the plans of the War Department. However, as this College had just completely revised all its curricula, and cast its courses in semester molds, it was decided to continue on that basis. In the final adjustment, S. A. T. C. men were handled in different classes from the other students even in the same subjects, and all difficulties of schedules were successfully and readily met.

INDUCTION OF THE CORPS

Induction ceremonies for the S. A. T. C. were conducted simultaneously all over the United States, at 12:00 o'clock, noon, October 1, 1918, eastern standard time. That brought them at 11:00 o'clock at the College. The men were formed on the slope east of the auditorium, the colors were raised, and the oath of allegiance administered.

Capt. George Sturges read the orders of the day, a message from President Woodrow Wilson, and instructions from Gen. Peyton C. March, chief of staff, United States Army; from Col. R. I. Rees, of the staff corps, who was in general charge of the educational work of the S. A. T. C.; and from Benedict Crowell, acting secretary of war. Captain Sturges then introduced President Jardine, who spoke briefly and introduced Major General Leonard Wood, from Camp Funston, who gave the principal address.

The day was sunny and warm, and, as a result of the long standing at attention, some of the men fainted in the ranks, and were carried away by comrades.

HOUSING AND FEEDING THE CORPS

For the housing of the S. A. T. C. the College rented the Young Men's Christian Association building on Eleventh and Fremont streets and the chapter houses of the following-named fraternities: Acacia, Alpha Psi, Aztex, Beta Theta Pi, Sigma Alpha Epsilon, Sigma Nu, Shamrock, Sigma Phi Delta, and Sigma Kappa Tau.

Soon after induction a mess hall was completed for feeding the S. A. T. C. This was in connection with the barracks occupied by enlisted men who were receiving mechanical training. This group shortly afterward was made section B of the S. A. T. C., the collegiate student group being designated as section A.

THE EPIDEMIC OF INFLUENZA

The Students' Army Training Corps had hardly been settled in quarters and adjusted in its schedule of military and college work combined, when an epidemic of influenza invaded it. The Young

Men's Christian Association and the leased fraternity houses became hospitals. College and military work was abandoned from about October 12 to November 4, and again from December 9 to December 21, 1918. Great hardship was experienced, as the quarters occupied were not equipped for hospital work. Members of the faculty and other Manhattan citizens made generous contributions of pillows, blankets, and other materials. Faculty women and others gave unstinted service as nurses and dietitians. It was a time of sore distress to the men and their parents. On October 18, 307 men were sick out of a total of 1,188 present in the two sections. The influenza developed into pneumonia in many cases, but the mortality rate was lower than in the regular army camps. In section A, which included those enrolled as students in the College, four deaths occurred, namely:

Casper M. Anderson, Neosho Falls, Kan.
Roy M. Doane, Osborne, Kan.
Charles M. Stipp, Urbana, Kan.
Victor W. Welton, Rantoul, Kan.

In section B, consisting of enlisted men who were not registered as students, seven deaths took place, namely:

Edward A. Cain, South Omaha, Neb.
Leo T. Connor, Woodriver, Neb.
Charles B. Hohnbaum, Waco, Neb.
Sidney M. Martin, Bassett, Neb.
Howard M. Nash, Palmyra, Neb.
Harold R. Peterson, Hartington, Neb.
Harold F. Thirtle, Omaha, Neb.

In seeking to provide a suitable memorial to those connected with Kansas State College who lost their lives in the World War, the stadium was adopted. The part of this structure which was designed to provide space for individual memorial tablets has not been erected. When it or any substitution is constructed, the names of students who were in the Students' Army Training Corps should be included. These men were in a corps of the army, and as truly died in national service as did those whose blood stained the battlefields of France.

The delay in the memorial feature contemplated for the stadium, led the College to construct a memorial which was placed in Recreation Center. This is a handsome piece of cabinet work rendered in black walnut, and provides $6\frac{1}{2} \times 10\frac{1}{2}$ inch spaces for 48 photographs of the honored dead. Those who died in the Students' Army Training Corps, unfortunately are not included. This memorial bears the caption "Lest We Forget," and the exhibition

of the portraits of those splendid young men is a perpetual testimony to the sacrifices entailed by war. Photographs of the following-named men are displayed:

Henry C. Altman, Amy, Kan.
Emory E. Baird, North Topeka, Kan.
Ralph V. Baker, Manhattan, Kan.
Joseph P. Ball, Independence, Kan.
Deland E. Bates, Cottonwood Falls, Kan.
George O. Beeler, Junction City, Kan.
Walter M. Blackledge, Onaga, Kan.
Walter O. Brueckmann, Kansas City, Mo.
McArthur B. Brush, Newton, Kan.
William T. Cleland, Alma, Kan.
W. Edwin Comfort, Manhattan, Kan.
George A. Cunningham, Cheney, Kan.
Glenn W. Davis, Manhattan, Kan.
Warren L. Day, Belleville, Kan.
Floyd E. Deshon, Logan, Kan.
Ernest D. Doryland, Manhattan, Kan.
Curtis V. Findley, Penokey, Kan.
Floyd L. Fletcher, Waldo, Kan.
George R. Giles, Wichita, Kan.
Ray F. Glover, Wamego, Kan.
Lester D. Hamil, Tonganoxie, Kan.
Lester Hanawalt, Jewell, Kan.
Harry R. Heim, Lincoln, Kan.
Carroll D. Hodgson, Hutchinson, Kan.
George A. Hopp, Saguyah, Okla.
Harry F. Hunt, Manhattan, Kan.
Calvin L. Irwin, LeRoy, Kan.
C. Chester Jones, Minco, Okla.
Clede R. Keller, Manhattan, Kan.
Wilbur F. Lane, Jamestown, Kan.
Carl F. Lasswell, Rossville, Kan.
Rollin H. Leedy, Cedar Vale, Kan.
Walter T. McKinney, Englewood, Kan.
George W. McVicar, Onaga, Kan.
Glenn G. Nicholas, Havensville, Kan.
Willis L. Pearce, Stockdale, Kan.
Delbert T. Pollock, Burlington, Kan.
Cedric H. Shaw, Pratt, Kan.
John P. Slade, Clay Center, Kan.
Joe R. Speer, Muscotah, Kan.
Frank E. Sullivan, Greeley, Kan.

Fred L. Taylor, Columbus, Kan.
I. I. Taylor, Manhattan, Kan.
George Titus, Harper, Kan.
Loyd B. Vorheis, Alva, Okla.
Edward D. Wells, Wichita, Kan.
George L. Wingate, Carlton, Kan.
Howard B. Wood, Elmdale, Kan.

During the war a large service flag was prepared on which a white star was sewed for each Kansas State man in service, and a yellow star for each life that was given. This flag was kept on display in Anderson Hall during the war and later, and is still preserved.

For many months the *Industrialist* printed the College Honor Roll, a list of College men who served in the armed forces of the Nation. This included 1223 names, among which were: four major generals, 7 colonels, 5 lieutenant colonels, 9 majors, 59 captains, 261 lieutenants, 97 sergeants, 67 corporals, and 12 electricians, ensigns, mechanics, etc. The major generals were James G. Harbord, '86, Eli A. Helmick, Frank W. Coe, and Wm. P. Burnham.

With the signing of the armistice and the probability that none of the men would be called into active military service, which was regarded as an opportunity by some and as a threat by others, interest in preparation for it was destroyed for the S. A. T. C. The course in War Aims was transformed into one treating of policies to be followed after the war.

Demobilization began early in December and was completed before the College resumed work December 30, 1918. Students were urged to remain in College at least long enough to complete the work for a term's credit, but a large number left at the first opportunity.

On account of the loss of time from closing the College because of influenza, the winter vacation was limited to the period from December 22 to 30, and the end of the first semester made February 8 instead of January 25, the net loss being two weeks. The second semester began February 10, 1919, instead of January 28, and ended June 5, instead of May 29, a net loss of one week.

EVALUATION OF THE CORPS

The work of the S. A. T. C. is difficult to evaluate. The late beginning, the devastation of influenza with the accompanying enforced vacations, the destruction of interest by the signing of the armistice, and the demobilization before a term was completed constituted adverse conditions which practically nullified educa-

tional efforts. Enough experience was gained, however, to indicate that the plan was sound and that reversion to it may well be made if the country again becomes enmeshed in a great war. In many of the colleges the S. A. T. C. is remembered as a sort of nightmare due chiefly to lack of cooperation between the military and the college authorities. At Kansas State College there was no such trouble, due, at least largely, to previous experience with military men and methods. In its unit of the S. A. T. C., collegiate authority dictated the procedure essential to effective coordination of the two lines of instruction.



BARRACKS NOS. 3 AND 4

This cut shows Barracks Nos. 3 and 4 as they appeared in 1939. They are part of those erected to care for enlisted men who were at the College for training in 1918. No. 3 at the left is used by the department of agricultural engineering, and the sliding doors are an adaptation of it to this purpose. No. 4 is used by several departments of the Agricultural Experiment Station. At the extreme left a portion of the Heat, Power, and Service Building is shown.

AMELIORATION OF HARDSHIPS OF WAR

The monotony of the routine of military drill and of the camp life of a soldier is such that it has always been recognized that such conditions are especially liable to lead to the depression of standards for the conduct of soldiers when off duty. The proximity of Manhattan to Fort Riley and Camp Funston made this problem of immediate importance to the residents of Manhattan, and to College students.

Self-protection, but more prominently actual benevolent interest in the welfare of the boys in khaki, led to the inauguration and maintenance of several types of service especially designed to safeguard the morals of the soldiers and the youth of the locality, and also to foster preservation of military morale. In all these, fac-

ulty members and their families, and the students, especially the young women, made invaluable contributions, from our entrance into the war to the complete demobilization of the national army.

SOCIAL SERVICE

Hospitality was extended in private homes, through church organizations, and in halls especially fitted up for the purpose. Opportunity was afforded for reading and playing games, and, under chaperonage, for dancing. The universality of the draft gave point to all civilian efforts to ameliorate soldier life. If one's own young men were not at Fort Riley or Camp Funston, the chances were that they were at some other post where other parents, sisters, or sweethearts were "doing their bit" to make the soldiers' lot more tolerable.

In Manhattan, rented quarters were used for some time, but in the fall of 1917 the Rotary clubs of the country threw their energy into war work, and November 1 a Rotary club was organized in Manhattan. The eleventh district of Rotary, which included parts of Kansas, Missouri, and Oklahoma, donated \$16,000, and the city of Manhattan voted \$15,000, in bonds, to finance the erection of a community house at the southeast corner of Fourth and Humboldt streets. On its completion it became the chief center of the social service for the soldiers.

The women of the student body and of the faculty contributed directly to the support of the nation at war by organization of a unit of the Red Cross which occupied itself in the preparation of hospital bandages. Knitting was fostered, and the production of socks and sweaters for the men in the trenches was carried on with a considerable degree of effectiveness. Women of the faculty and student body also assisted in social affairs for the soldiers given in the Hostess House at Camp Funston.

SERVICE IN CAMPS AND PRISONS

Agencies for amelioration of the condition of soldiers in service and in prisons were at work at an early date. Even before the entrance of this country into the war an appeal was made to the fellow feeling of cultivated persons, and contributions of money and material were sought by speakers on the campus for the relief of prisoners of war whose minds as well as bodies were severely tried by conditions.

After formal declaration of war such benevolent enterprises were supported with increased vigor. One of the most important of these created the Students' Friendship War Fund, by a nationwide organization, and presentation by convincing speakers of the

imperative and extraordinarily great need for extra-military assistance in providing humanizing conditions, entertainment, and relaxation for soldiers in training camps and in active service at the front.

In October, 1917, representatives of this College met at Topeka with those from other colleges of the state and heard lectures from men and women who had engaged in this work abroad, and organized a campaign to raise funds at the several institutions. Quotas were agreed upon for each, and the representatives undertook the task of raising them. The quota for this College was \$8,000.

A mass-meeting of the students and faculty members was called which was addressed by local speakers and most effectively by Harry White. Subscriptions were taken at the meeting, and through well-organized committees every student and every teacher who did not subscribe at the meeting was visited, and a donation from each sought. So active was the committee, so appealing the cause, and so generous the spirit of the college group, that more than \$11,000 was pledged.

The Students' Friendship War Fund went to the benevolent organizations which maintained forces with the army, prominently the Young Men's Christian Association, Knights of Columbus, and Salvation Army.

After the signing of the armistice, the need of such service was no less great. It was carried on by the coordinated activity of the Young Men's Christian Association, the Young Women's Christian Association, the National Catholic War Council, the Jewish Welfare Board, the War Camp Community Service, the American Library Association, and the Salvation Army. Support was solicited for a United War Work Fund which was divided among these organizations, and was a successor of the Students' Friendship War Fund. Kansas State College faculty and students contributed more than \$13,600 to this fund.

REHABILITATION OF VETERANS

The Government adopted a policy of rehabilitation in respect to men in service who by reason of wounds or other causes had been made unable to pursue successfully the respective vocations in which they were engaged when they went into the service. In the administration of this policy a very liberal attitude was taken.

Kansas State College was approved as one of the institutions to which a veteran might be sent to receive an education that would prepare him for supporting himself in a new line of effort. The governmental agency in charge of this work at first was the Federal Board for Vocational Education, and later the Veterans' Bureau.

CONTRACTS WITH THE GOVERNMENT

The College entered into contracts with the Government in respect to the work of the trainees. At first an individual contract was made for each, but later general contracts covering groups were used. The Government paid all College fees and charges on account of a trainee, and also for books, instruments, and other materials which were required by the College to be used by any student in the course pursued by a trainee. If a set of drawing instruments was necessary, the Government paid for it. In addition the trainee was given a maintenance allowance deemed sufficient to support himself and any family which he had.

The first students received under these benefactions came in January, 1919. Previous to September 1, 1919, only eleven had been enrolled. Plans for this service assumed active administration with reference to the college year 1919-20, and within that period 44 were enrolled in collegiate classes and 175 in non-collegiate. In 1920-21, 99 were in collegiate subjects and 239 in non-collegiate. For 1921-22, the corresponding figures were 141 and 235; for 1922-23, 97 and 158; for 1923-24, 76 and 104; and for 1924-25, 41 and 35. Very few were enrolled later, the last being in 1927.

The great majority of the men in service were not graduates of high schools, and as these trainees were admitted on practically the same academic conditions as were other students, more of them were received for short-course training in agricultural or mechanical vocations. Of the collegiate students many were enrolled only as special students, but of those enrolled for curricula leading to degrees, a significant number continued to graduation, and some now occupy positions of honor and responsibility.

Those in authority sent trainees only to institutions which after investigation had been found equipped and manned so as to be in position to give excellent instruction, and the approval of an institution was regarded as an honor, and the contract with the Government included a provision that this approval might not be used by the College in advertising.

TYPES OF EDUCATION AND TRAINING

As training got under way, it was found that some of the trainees were in need of schooling in the most elementary branches, such as arithmetic and spelling, and the College employed a tutor to give them this instruction, and the Government paid a special tuition fee covering that service.

All sorts of combinations of training in mechanic arts and academic subjects regularly taught were made for these men. In addition to the regular curricula in the College and the School of

Agriculture, vocational instruction was given in general farming, horticulture, poultry husbandry, bee-keeping, automobile repair, automobile operation, tractor operation, carpentry, blacksmithing, foundry work, the machinist's trade, acetylene welding, electrical repair work, and other activities. The College was reimbursed by means of special tuition charges paid by the Government for the instruction in some of these lines. Even instruction in voice was financed for one student, and study by correspondence was provided for in many cases.

After sufficient schooling was deemed to have been received, many of the men were given placement training on the job. Men starting in farm work of some sort were visited two or three times a month by a specialist in the employ of the College at the expense of the Government, and counseled concerning problems that might be arising in connection with the pursuit of their respective vocations. This phase of the work was in charge of the Division of College Extension.

COORDINATION

Initial contacts with the students, suggestions concerning courses advisable, and conferences of a general character were at first part of the work of the vice-president, who was designated as a counselor. The deans of Divisions had the same responsibilities for these students as they had for others. About March 1, 1920, a representative of the Government called a coordinator was appointed. He took over much of the counseling work, and the keeping of special records. The vice-president continued to be responsible for the execution of contracts, the presentation of bills, and any correspondence. The business office had the important, delicate, and extremely irritating job of making out the bills against the Federal Board for Vocational Education, and later the Veterans' Bureau, in such terms as would pass the auditors. The correspondence of the period bristles with asperities, all due to the difficulty of getting on common ground in a complex situation.

The coordinators who served for the Government in the rehabilitation of veterans were: O. W. Price, on or about March 1, 1920, to February 6, 1921; Ed. L. Littleton, February 6, 1921, to February 14, 1922; H. R. Joslin, February 14, 1922, to October 16, 1922; and Frank H. Gulick, October 16, 1922, to February 1, 1925. They performed the duties of a difficult position in a commendable manner.

CHAPTER XI

ADMINISTRATION OF FRANCIS DAVID FARRELL

MARCH 1, 1925, TO——.

THE duties of the presidency were assumed by Francis David Farrell, March 1, 1925. Within a week an important bill was approved by the governor of the State concerning the managing board of the College. From July 1, 1917, the College had been governed by the Board of Administration, which had in its charge all the educational, benevolent, and penal institutions of the State.

The Board of Administration consists of the governor of the State, by virtue of his office, who is chairman, and three persons appointed by him who are subject to removal "when in his judgment the public service demands it." The governor thus has complete power over the Board and hence responsibility for its acts whether of commission or omission.

The educational institutions were the least of the worries of the Board, and, indeed, the wording of the law was primarily adapted to the functions, conditions, and personnel of a penal institution rather than to those of a university or college. The linking of the management of the three classes of institutions resulted in irritations in the educational institutions. The unlimited power of the governor to take peremptory action was also not regarded as in keeping with wholesome conditions at the State schools.

THE BOARD OF REGENTS

Almost from the beginning of the existence of this second Board of Administration there was discussion of the possibility of placing the educational institutions under separate management, and it finally reached a result in 1925, when an act was passed "creating the State Board of Regents for certain State educational institutions."

Section 1 of the act reads:

That there is hereby created a State Board of Regents of the state of Kansas, composed of nine members, who shall be appointed by the governor. Of such nine members first appointed, three shall be appointed for a term of one year, two for a term of two years, two for a term of three years, and two for a term of four years, said terms to begin simul-



FRANCIS D. FARRELL

Dean, Division of Agriculture and Director of Agricultural Experiment Station, 1918-1925. President, 1925——.

taneously upon the qualification of the persons appointed therefor and terminating on June 30, in the respective years. Upon the expiration of the term or terms of any of the regents first appointed as aforesaid, succeeding regents shall be appointed and shall hold their office for a term of four years, and until their successors shall have been appointed and qualified. In case of a vacancy in the board of regents, the governor shall appoint and fill said vacancy for the unexpired term. After the appointment and qualification of said board of regents, it shall meet and organize by electing one of its members chairman.

Section 6 provides:

That said Board of Regents shall have full power and authority to appoint the executive heads of the institutions under its jurisdiction with power to remove said executive heads, deans, professors, teachers or other employees, at the discretion of the Board.

The law is short and readily understood. The four-year term, the omission of confirmation by the senate, and the lack of power of summary removal by the governor all make for free and intelligent action by the individual Regent, and for continuity, or gradual development of institutional policies. A member of the Board receives no compensation except reimbursement for "actual traveling and necessary expenses incurred while in the discharge of his official duties."

Appointment to membership on the Board is a distinct honor and has been accepted as such by high-grade men and women. The law became effective July 1, 1925. The members first appointed were: for the one-year term, W. Y. Morgan, Charles M. Harger, and Geo. H. Hodges; for the two-year term, C. W. Spencer and C. B. Merriam; for the three-year term, W. J. Tod and B. C. Culp; and for the four-year term, Mrs. J. S. Patrick and Earle W. Evans.

This Board elected Mr. W. Y. Morgan chairman, and he carried the duties of this position with courtesy, ability, and genuine interest in the institutions until his death, February 17, 1932. Succeeding him as chairman was Mr. Charles M. Harger, who was equally as successful in every respect as Mr. Morgan had been, and his facility in ready and thoughtful public speaking was drawn upon times without number.

On the expiration of the fourth term of appointment for Mr. Harger, Mr. Ralph T. O'Neil was elected chairman, effective July 1, 1938. The chairmanship of the Board is a responsible position, as

many general and routine matters are passed upon by the chairman from week to week without reference to the whole Board, which holds rather infrequent meetings.

BUSINESS MANAGER

An abnormal feature of the new act in respect to Regents of the State educational institutions was the implied provision that the State business manager appointed by the Board of Administration should continue to serve as business manager for the State educational institutions, but all his powers and duties are "exercised by such business manager by and through said Board of Regents." The material needs of an educational institution are very different from those of a hospital for the insane, or of the penitentiary, for examples, and purchasing for the different types of institutions may reasonably require differences in procedure. The breadth of view and considerate attitude of the business managers of the State have been sufficient to save the educational institutions from much unnecessary annoyance and injury which might easily have been imposed.

On the whole it seems safe to say that the present law providing for the management of the five State educational institutions is the best that we have had. The Board is in position to direct in general the activities of the schools so as to determine the scope of each, and thus prevent expensive duplications of curricula, courses, and equipment. Having done that, and appointed able heads for the institutions, the details of operation and local control are left to the individual institutions.

After the foregoing was written, the legislature of 1939 enacted a measure which again reorganized the Board of Regents. The chief purpose of this law is to bring under the control of the Board of Regents certain institutions that are primarily educational in their function, but which have been under the Board of Administration. These institutions are: the School for the Blind at Kansas City, Kansas, the School for the Deaf, at Olathe, the Kansas Vocational School, at Topeka, and Western University, at Kansas City. The last two are for colored persons.

It was held that inclusion of the additional institutions required that appointment to membership in the Board shall be subject to confirmation by the senate, and this provision is incorporated in the new law, thus introducing all the disadvantages previously described, in respect to uncertainty of tenure. (See page 97.)

The Board consists of nine members, and the length of the term of each, after the plan is in full operation, is four years. An interesting provision is one designed to remove the Board from partisan

politics, in "that all members of the Board of Regents shall be selected from among the members of the two political parties casting the highest and second highest number of votes respectively for secretary of state at the last preceding general election and that at no time shall more than five members of said Board of Regents be members of the same political party."

No member of the Board receives any compensation beyond reimbursement for actual and necessary expenses, but the Board is empowered to employ a full-time secretary.

GOLDEN JUBILEE OF HOME ECONOMICS EDUCATION

President Farrell did not provide an inaugural program for a formal induction to the presidency of the College, though he was made president as distinguished from acting president on May 5, 1925, and might easily have made such a program a feature of the commencement exercises. On taking office he found already under way a plan for celebration of the introduction of home economics work in the educational program of the College.

Though President Denison in 1872 had envisioned a time when "domestic economy" would be added to the industrial arts already offered at the College, and even the curriculum adopted by the Board of Regents, September 15, 1872, provided for a term of "Farm and Domestic Economy," it was left for Pres. John A. Anderson actually to bring it to pass, in December, 1873. Recognition of this simple forward step took the form of a Golden Jubilee celebration planned by Dean Margaret M. Justin, though the actual fifty-year point had been passed.

The celebration took place April 16 and 17, and a large number of alumnae of the College returned to participate in it. Thursday evening, the 16th, was given to a meeting devoted to reminiscences presented both formally and informally, and was really a heart-moving and thrilling occasion. President Farrell welcomed the guests, and Prof. Nellie Kedzie Jones, Dr. Henrietta Willard Calvin, and Dean Mary Pierce Van Zile gave the principal addresses. Dean Justin read a reminiscent letter from Dean Helen B. Thompson, and spoke of her accomplishments for the Division of Home Economics. Those five women were administrative officers covering 1881 to the present time.

At the close of these addresses 51 candles were ceremoniously lighted on a huge birthday cake. The candles not only symbolized the 51 years of the organized existence of home economics instruction, but the 51 countries and states in which home economics graduates reside. Following this ceremony more than a dozen of

the women of earlier days responded to calls for speeches. Some of these were on their last visit to the College.

On Friday the College assembly period was given to an address by Miss Abby L. Marlatt, director of home economics in the University of Wisconsin, and to conferring honorary degrees upon her, Mrs. Jones, and Mrs. Calvin. The degree doctor of laws was conferred by President Farrell on Mrs. Jones and Mrs. Calvin, and doctor of science on Miss Marlatt. The President announced also that the cafeteria building had been named Thompson Hall in honor of Dean Thompson; the women's dormitory, Van Zile Hall in honor of Dean Van Zile; and the home economics building, Calvin Hall in honor of Doctor Calvin.

At the close of the assembly, the jubilee guests, followed by students and others, left the auditorium in a procession and visited the various buildings on the campus where subjects in the field of home economics had been taught. Short addresses were made at each. The march ended at Calvin Hall, where the newly carved name on the building was unveiled. Following this a luncheon was served in the basement of Calvin Hall.

Unusually good accounts of the several features of this Golden Jubilee were printed in the *Industrialist*. These embody much real history, the articles beginning a few weeks in advance of the celebration. The whole affair was highly successful.

FINANCIAL FEATURES, 1924-1939

Federal support for the land-grant colleges has been greatly extended during the last fifteen years. This has been for the advancement of basic research related to agriculture, for extension work, and for more complete endowment of these colleges.

CLARKE-McNARY ACT

A minor field of activity in which State work by the College is supported in part by Federal funds is that covered by the Clarke-McNary Act, which was approved June 7, 1924. This is entitled "An act to provide for the reforestation of denuded areas, for the extension of national forests, and for other purposes, in order to promote the continuous production of timber on lands chiefly suitable therefor." The act is administered by the Secretary of Agriculture, and in respect to some of its objectives he may allot funds to the various states for use in cooperation with the Department of Agriculture. Such states are required to expend an amount each year at least equal to that contributed by the Department. The College receives about \$1,000 a year from this source. This is applied toward the salary of an extension forester, now (1939)

Assoc. Prof. Lloyd F. Smith, who has been a member of the department of horticulture since 1935 and State forester since 1936. The major phases of the extension work are improvement of wood lots and the development and renewal of farmstead windbreaks.

PURNELL ACT

The so-called Purnell Act was approved February 24, 1925. This was entitled "An act to authorize the more complete endowment of agricultural experiment stations, and for other purposes." It authorized Congress to appropriate \$20,000 to each state for the fiscal year ending June 30, 1926, \$30,000 for 1927, \$40,000 for 1928, \$50,000 for 1929, \$60,000 for 1930, and \$60,000 for each fiscal year thereafter. These payments are for the benefit of the agricultural experiment stations established under the provisions of the Hatch Act, which was approved March 2, 1887.

The Purnell Act provides that:

The funds appropriated pursuant to this act shall be applied only to paying the necessary expenses of conducting investigations or making experiments bearing directly on the production, manufacture, preparation, use, distribution, and marketing of agricultural products and including such scientific researches as have for their purpose the establishment and maintenance of a permanent and efficient agricultural industry, and such economic and sociological investigations as have for their purpose the development and improvement of the rural home and rural life, and for printing and disseminating the results of said researches.

The Purnell Act thus permits funds appropriated under its provisions to be used as are funds provided by the Hatch Act and the Adams Act, but there is an added breadth of view in the new act. The earlier two were definitely for conducting "original researches or experiments bearing directly on the agricultural industry of the United States, having due regard to the varying needs and conditions of the respective states and territories." These terms might by liberal construction be made to cover phases which the Purnell Act definitely expresses; namely, development and improvement of the rural home and rural life resulting from economic and sociological investigations, but they have not been so used to any extent.

This amplification of the field of research is emphasized by the allowance of an annual fund of \$60,000, while the Hatch and Adams acts provide for only \$15,000 each.

CAPPER-KETCHAM ACT

May 22, 1928, the Capper-Ketcham Act was approved. This is "an act to provide for the further development of agricultural extension work between the agricultural colleges in the several states *** and the United States Department of Agriculture." Its purpose is to develop the cooperative extension work in agriculture and home economics inaugurated under the Smith-Lever Act, approved May 8, 1914, but with certain modifications in the use of the funds.

The Capper-Ketcham Act provides for the appropriation of \$20,000 annually to each of the states, and also for a share in \$500,000 annually which is divided among the states and territories "in the proportion which the rural population of each state bears to the total rural population of all the states as determined by the next preceding Federal census." This share is contingent upon the provision of an equal amount by agencies of or within the State. It amounts to about \$10,000 annually for Kansas State College.

BANKHEAD-JONES ACT

A comprehensive act of Congress known as the Bankhead-Jones Act was approved June 29, 1935. Its purpose as stated in the title is: "To provide for research into basic laws and principles relating to agriculture and to provide for the further development of cooperative agricultural extension work and the more complete endowment and support of land-grant colleges." The law thus authorizes appropriations to support the three major fields of activity of the land-grant colleges, (1) research, (2) extension, and (3) resident instruction.

Section 1 of the act reads as follows:

The secretary of agriculture is authorized and directed to conduct research into laws and principles underlying basic problems of agriculture in its broadest aspects; research relating to the improvement of the quality of, and the development of new and improved methods of production of, distribution of, and new and extended uses and markets for, agricultural commodities and by-products and manufactures thereof; and research relating to the conservation, development, and use of land and water resources for agricultural purposes. Research authorized under this section shall be in addition to research provided for under existing law (but both activities shall be coordinated so far as practicable) and shall be conducted by such agencies of the Department of Agriculture as the Secretary may designate or establish.

By the provisions of section 2:

The Secretary is also authorized and directed to encourage research similar to that authorized under section 1 to be conducted by agricultural experiment stations established or which may hereafter be established in pursuance of the Act of March 2, 1887, providing for experiment stations, as amended and supplemented, by the allotment and payment as provided in section 5 to Puerto Rico and the states and territories for the use of such experiment stations of sums appropriated therefor pursuant to this title.

In support of research under this law there was appropriated \$1,000,000 for the fiscal year ending June 30, 1936. Amounts increasing each year by \$1,000,000 are authorized until \$5,000,000 is reached, after which date \$5,000,000 may be appropriated annually.

Of the sums so appropriated, 40 per cent is designated as a "Special research fund, Department of Agriculture," and any use of it must be with the written approval of the secretary of agriculture. One half of this fund:

Shall be used by the Secretary for the establishment and maintenance of research laboratories and facilities in the major agricultural regions at places selected by him and for the prosecution, in accordance with section 1, of research at such laboratories.

The remaining 60 per cent is available for the purposes of section 2, and the secretary of agriculture allots to Puerto Rico and each state and territory an amount which bears the same ratio to the total amount, that the rural population of the unit bears to the total rural population of the units. These allotments are not paid to any unit which does not match them by an equal amount of "its own funds for research, and for the establishment and maintenance of necessary facilities for the prosecution of such research." Under these provisions when the Bankhead-Jones law reaches its limit in 1940, the College will receive from the Federal Government about \$61,250 for research.

In support of cooperative work in agricultural extension, the Bankhead-Jones law authorized an initial appropriation of \$8,000,000, which might be increased by \$1,000,000 each year until it reached \$12,000,000. Of these sums \$980,000 is paid each year to the states and the territory of Hawaii in equal shares. From the remainder, an amount is paid to each unit that is in the same ratio to the entire sum available, as the farm population of the unit is to the total farm population of all the units. Hawaii and the states

are not required to match these appropriations by their own funds. The amount that Kansas State College will receive in 1939-40 and succeeding years will be approximately \$274,600. This large provision for extension is accompanied by abandonment of the supplementary Smith-Lever and other emergency appropriations for cooperative extension work.

The third purpose of the Bankhead-Jones law is to endow more completely the colleges organized under the original Morrill Act and acts supplemental thereto. The law provides that for each fiscal year after it took effect an appropriation of \$980,000 may be made which is to go in equal shares to the states and the territory of Hawaii. Each unit would thus receive \$20,000 annually.

In addition, \$500,000 was authorized for the second fiscal year of operation of the law, and sums increasing each year by \$500,000 for succeeding years until a total of \$1,500,000 was reached for 1938-39. From that date the annual amount on this account would be \$1,500,000. This is allotted to the states and Hawaii in amounts proportional to their total population, and is used in accordance with the provisions of the second Morrill Act, that of August 30, 1890. The support coming to the College on this account is about \$43,000 a year.

APPROPRIATIONS FOR COOPERATIVE WORK

Beginning in 1931-32, Federal appropriations of an emergency or temporary character were made for cooperative extension in addition to those provided by appropriations pursuant to the provisions of laws of permanent force. A specialized service closely connected with this was that rendered by county agricultural agents in the inauguration of the activities of the Agricultural Adjustment Administration. It would have been practically impossible to carry out the provisions of this relief, restoration, and conservation measure if there had not existed this nation-wide body of educated, experienced, and trustworthy men. In consideration of the fact that these men were diverted from their normal field of work, their salaries were met in part by Agricultural Adjustment Administration funds. Later their activities were restricted to cooperative extension work in that connection, and payment of salaries was made from funds appropriated for cooperative extension.

Study of the cooperative work of the United States Department of Agriculture with land-grant colleges, in some of the aspects of their functions, discloses a continually widening scope and increasing diversity of manifestation. More than 25 men are engaged in cooperative research in the Agricultural Experiment

Station of this College or are ranking officers in instruction by college extension. More than 150 county agricultural agents and home demonstration agents receive salaries derived in part from both Federal and State sources, and in their cases the situation is still further complicated by the fact that in each case county funds are also contributed. Altogether the situation presents a vivid picture of present-day interdependence and cooperation.

State and Federal cooperation is also manifested in an all-pervading way in the payment of teachers of vocational subjects and the training of such teachers.

CHIEF UNITS OF INCOME FROM FEDERAL SOURCES

For convenience in reference, the chief sources of College income from Federal sources are tabulated below:

First Morrill Act, July 2, 1862, endowment fund derived from sale of land granted, \$505,508.56, yielding about \$20,000 a year.

Hatch Act, March 2, 1887, \$15,000 a year.

Second Morrill Act, August 30, 1890, \$25,000 a year.

Adams Act, March 16, 1906, \$15,000 a year.

Nelson Amendment fund, March 4, 1907, \$25,000 a year.

Smith-Lever Act, May 8, 1914, about \$97,000 a year.

Smith-Hughes Act, February 23, 1917, and Act of February 5, 1929, to provide further for vocational education, about \$10,000 a year.

Clarke-McNary Act, June 7, 1924, \$1,000 a year.

Purnell Act, February 24, 1925, \$60,000 a year.

Capper-Ketcham Act, May 22, 1928, about \$30,000 a year.

Bankhead-Jones Act, June 29, 1935, about \$378,000 a year (from 1939-40).

IMPOUNDING STATE APPROPRIATIONS

The legislature of 1931 made appropriations for the College which were generous when judged by financial conditions in the State. Owing to reductions made in the valuation of real estate for taxation, it became probable that unless the rate of the levy for State purposes were increased, there would not be sufficient money collected to meet the appropriations. This probability was increased by the indication that because of crop failures there would be a heavy delinquency in payment of taxes.

The authorities were averse to increasing the tax rate, and in August, 1931, Governor Woodring held conferences with admin-

istrative heads of the various State institutions with the object of obtaining voluntary reductions of expenditures below appropriations to such an extent that the taxes collected would probably meet the expenses incurred.

This plan was adopted, and in carrying it out it was decided that Kansas State College should leave unspent \$82,524 that had been appropriated to it. Salaries were not touched in 1931, as the budget adopted was regarded as equivalent to a contract with members of the personnel. The savings were effected by reducing the amounts available to the several departments and projects, and by leaving about \$58,000 in the general appropriation for maintenance.

For the fiscal year 1932-33 much greater reductions were made including cutting salaries ten per cent. An appropriation of \$60,000 had been made for a dairy barn and experimental plant for the work in dairy production. Only \$45,000 was expended, certain parts of the building being eliminated. Of the funds definitely appropriated to the College to be available within the biennial period ending June 30, 1933, the total amount undrawn was \$464,986.82. This was distributed among many items. Kansas State College itself lost \$450,174.23; the Fort Hays Branch Experiment Station, \$7,875.00; the Colby Branch Experiment Station, \$2,937.59; the Garden City Branch Experiment Station, \$3,000; and the Tribune Branch Experiment Station, \$1,000.

To clear the books, the legislature of 1933 passed an act whereby the treasurer of the State was "authorized and directed to charge off from moneys appropriated by the legislature of 1931," amounts from 26 distinct items which aggregated the sums stated previously for the College and the branch stations. The other State institutions were similarly involved, and the savings that had been agreed upon by the administrative officers reached a total for the State of \$2,942,650.91.

APPROPRIATIONS REDUCED

In 1933 the legislature cut the College biennial appropriation about 25 per cent below that for the biennium, 1931-1933. It also provided that for the next two years the matriculation and incidental fees charged resident students should be reduced 25 per cent. On account of the great reduction in revenue expected, further reductions in salaries of faculty and employees were made. These made a total of 25 per cent below the schedule for 1931-32, but this was not applied as a blanket reduction. The higher salaries were cut greater percentages than were the lower salaries. In each salary the first \$1,000 or fraction thereof was cut 15 per cent; the

second \$1,000, 20 per cent; the third, 25 per cent; the fourth, 30 per cent; and anything above \$4,000, 35 per cent.

The salary cuts made have not been restored (1939) in a general way, though individual cases have been adjusted. The matriculation and incidental fees have been restored to their former level for residents of Kansas and increased for non-residents. In the meantime the enrollment of students has increased from 2,928 in 1933-34 to 4,800 in 1938-39. This greatly increases expenses, but also provides a larger sum from fees paid by students, which partially offsets these.

NATIONAL YOUTH ADMINISTRATION

The National Youth Administration has constituted an indirect source of considerable financial support to the College. The prime object of this agency is alleviation of the hardships of the depressed business condition in their impingement upon the young. One aspect of this hardship is a threat of deprivation of college education by reason of lack of a normal opportunity for young persons to obtain employment by means of which money may be earned to cover college expenses.

The National Youth Administration allotted funds to educational institutions to enable them to employ worthy young men and women who without such employment would be unable to attend a college. A condition of the allotment was that the work given the students should be such as the institution would not otherwise have had funds to do.

These students at Kansas State College were selected by a committee which considered applications made through the use of a blank which called for much detailed information concerning the applicant. The high-school records of the applicants were also carefully studied. The number of applicants far exceeded the number which could be employed. The committee in making selections first satisfied itself in respect to the actual need of applicants for the employment, and from those not thus eliminated persons were selected with the highest standing in their high-school work.

The earnestness and ability of the young men and women employed in this way has been such that they have excelled in college work, and been very satisfactory as a group in respect to service rendered. The College has been very careful to leave no doubt that this fund is not a gift to the students. The accompanying table indicates the importance of this subsidy to the College and the students.

Expenditures through the National Youth Administration, and the College Student Employment Project of the Federal Emergency Relief Administration:

Academic Year	Number of Students Employed			Amount Allotted to K. S. C.
	Men	Women	Total	
1933-34 C. S. E. P. (Second Sem.)	154	76	230	\$ 12,900.00
1934-35 C. S. E. P.	211	111	322	\$ 33,775.00
1935-36 N. Y. A.	286	122	408	\$ 42,464.61
1936-37 N. Y. A.	407	160	567	\$ 60,547.50
1937-38 N. Y. A.	252	118	370	\$ 41,422.00
1938-39 N. Y. A.	257	135	392	\$ 41,580.00
Total C. S. E. P. and N. Y. A.	1,567	722	2,289	\$232,689.11

THE FIELD OF INSTRUCTION, 1925-1939

In the academic work offered by the College there has been a significant increase and revision in respect to courses, or subjects of study, but not much has been added to the number of four-year curricula. Additional curricula in most cases have been made up almost entirely by new arrangements of courses that were being offered in other connections, and thus have not entailed added expense for teaching to any important extent.

CURRICULA

Such new four-year curricula, with dates of introduction, are: architectural engineering, 1925; physical education, 1925; agricultural administration, 1927; public school band and orchestra, 1927; commerce with special training in accounting, 1931; home economics and journalism, 1931; home economics and institutional economics and dietetics, 1931; agriculture with special training in landscape gardening, 1931, changed to landscape gardening in

1934; music education, which replaced public school music and public school band and orchestra, 1932; applied music, which replaced piano, violin, and voice, 1932; milling industry, which replaced flour mill engineering, 1933; industrial arts, 1937; and specialized horticulture, 1937. The curricula in landscape gardening and in landscape architecture were dropped in 1937.

In addition to the foregoing, a six-year curriculum in general science and veterinary medicine was offered, 1927, but this was dropped in 1938. In 1932 a pre-veterinary year was prescribed, following graduation from high school, for the four years of professional work in veterinary medicine.

BACHELOR OF ARTS DEGREE PROPOSED

In 1929-30 considerable activity was manifested in advocacy of extending the scope of the College and offering work leading to the degree bachelor of arts. Discussions of the matter took place in meetings of the faculty of the Division of General Science and elsewhere, and local newspapers joined in the movement toward this extension.

With the great increase in the number being graduated from high schools, and of those going on to colleges, convenience of access to an institution of higher education has become of interest to a much larger part of the population. An indication of this is seen in the great increase in the number of junior colleges operated.

With any college or university a large fraction of the student body is derived from within a radius of fifty miles, though with the universal use of the automobile the tendency has been for this radius of ready accessibility to be considerably lengthened. The convenience and economy of residents of the home town will always be an important factor in the creation of pressure groups.

The local interest in having the degree bachelor of arts offered by Kansas State College led to the appearance of a committee of citizens before the Board of Regents in June, 1930, asking such action. The Board did not see fit to grant this request, but apparently took no vote upon it. The opposition of President Farrell to such an extension was well known.

FIELD OF THE COLLEGE

President Farrell holds that the land-grant colleges occupy a unique and highly important field in education, one in which the application of the physical and biological sciences to the industries is the dominant characteristic, but which is accompanied by a significant amount of study in one or more of the liberalizing sub-

jects, economics, history, sociology, literature, drama, music, art, etc. He consistently and constantly advocates the inclusion of liberalizing courses in the technical curricula. The importance of such culture for the technical man is coming to be very generally recognized, and promoters of engineering education are zealously advocating broadening the collegiate experience of engineers.

While culture outside their special studies is advocated for the man of science or technology, President Farrell believes that Kansas State College should not enlarge its scope to the extent of promoting curricula consisting so predominately of the so-called culture subjects as to justify award of the bachelor of arts degree to those who complete them. Such provision would require the establishment of additional departments and greatly enlarging others. He holds that it is far better for the institution to progress vertically than horizontally, to cultivate more intensely one legitimate field rather than by making its scope more inclusive to become, at least in part, a competitor in a field, opportunities for instruction in which are already abundant and readily accessible. The College would thus become vulnerable in any renewed charge of needless duplication accompanied by heavy additional expenditures.

SOCIETY OF SIGMA XI

Membership in the society of the Sigma Xi was for many years apparently unattainable to the older members of the science personnel of the College. Young men were coming into the faculty who had won that distinction elsewhere, but the organization seemed to be set in the policy of establishing chapters only in important universities. This situation was ameliorated to a certain extent by the recognition of some members of the Kansas State College faculty by chapters at other institutions. Prof. George A. Dean was elected by the chapter of the University of Nebraska in 1917, and within the period 1922 to 1927, L. D. Bushnell, W. M. Jardine, J. T. Willard, J. H. Parker, J. W. McColloch, H. W. Brubaker, R. A. Seaton, F. D. Farrell, L. E. Conrad and Margaret M. Justin were elected by the chapter of the University of Kansas. These elections were expressions of the cordial relations that have always existed between the scientific staffs of the University of Kansas and of Kansas State College.

A Sigma Xi club was formed at the College the fall of 1923. This club cooperated with chapters at Lawrence and elsewhere in bringing lecturers to the campus, and promoted local Sigma Xi consciousness. In December, 1925, active efforts were begun, looking to the establishment of a chapter at Kansas State College. Omitting any account of the examination of the institution by

questionnaires, suffice it to state that a charter was granted, and March 3, 1928, the chapter was formally installed by Dr. George A. Baitsell of Yale University. The charter roll includes 57 names of persons, all of whom were already members of the society through other chapters.

Recognition of Kansas State College by Sigma Xi was facilitated by the previous establishment of chapters at Purdue University, Michigan State College and Iowa State College, which are also independent land-grant colleges. This may be regarded as an unofficial accrediting of the College as a research institution. The chapter has been a valuable adjunct through its cooperation in providing lectures by distinguished men of science, and its encouragement of research by students and faculty.

OPTIONAL ATTENDANCE

The view of the faculty throughout the history of the College has been that attendance at classes is an important factor in the education of a student. Records of absences have been kept, and disciplinary action has followed serious delinquency in attendance.

As a student advances in the curriculum, it would seem that he should be able to see for himself the importance of attending classes, and that the application of a rule should not be necessary. In recognition of this, on the suggestion of the president, the Council of Deans voted, January 7, 1926, to make attendance optional in the case of any student who met certain qualifications, as follows:

Any student regularly classified as a senior during the first semester of the college year 1925-26, and making during that semester a total of not fewer than 32 points, and an average of not fewer than 2 points per credit hour of his assignment, shall not be subject during the second semester of the same college year to the college rule concerning attendance at classes.

The scholarship indicated by two points per credit hour is that shown by a grade of "B," and about 25 per cent of the seniors should have been eligible. Any absence of a student was recorded and reported the same as before. The attendance record of those accorded the privilege of optional attendance was found to be about the same as that of the parallel group of the year before under required attendance. The experiment was therefore continued for the college year 1926-27, and extended to junior students the second semester of that year on the same conditions.

This privilege was renewed from time to time until it became established, and was announced in the catalogue for 1931-32. It

was restricted somewhat by a change which provided for use of the student's record for the last two semesters of his attendance instead of but one. The number of points required was reduced in 1934 from 32 to 30 for students in curricula having but 15 semester hours per semester.

In 1937-38 the privilege of optional attendance was given to all senior students, and after careful statistical study of the scholastic results, the Council of Deans voted to continue the trial through the year 1938-39. A proposal to extend the privilege to selected sophomores, on the conditions applicable to selected juniors, was not adopted.

CLASS PERIODS SHORTENED

Following prolonged effort by some, the Council of Deans voted December 16, 1931, to increase the interval between the active class periods to ten minutes. The classes thus come to order on the even hour, and are dismissed at the end of fifty minutes. This change was made necessary by the growth of the campus. The distance from Nichols Gymnasium to Waters Hall is practically one-half mile. While an effort is made to have the sequence of classes such that travel shall be reduced to a minimum, in individual cases, and especially those in which the student does not have a regular assignment, covering a considerable distance between classes is unavoidable.

MID-YEAR GRADUATION

While the College was on the three-term plan for the calendar, it gradually came about that a significant number of students completed the requirements for graduation at the end of the fall term each year. In 1911, at the regular College assembly, December 22, a group were graduated as the second division of the class of 1911. Similar graduation exercises were held up to and including 1916, when the introduction of the semester plan terminated the practice. It had proved to be useful to a good many students, and much of this advantage was preserved by establishing in 1917 the practice of graduating candidates at the end of the summer session.

Under the present semester plan many students complete the requirements for graduation at the end of the first semester of the academic year, and prompt graduation would be a distinct advantage to some. An experiment in respect to such graduation began in 1936, when students who completed the requirements at the end of the first semester were graduated at that time if they requested it. In such cases the graduate did not participate in the commencement exercises at the end of the year. No graduation

exercises were held at mid-year, and comparatively few took advantage of the privilege offered. This issuance of diplomas at mid-year was discontinued March 30, 1938.

ADVANCED DEGREES

The scholarship standards of the College have undergone continuous elevation concurrently with the enormous expansion in knowledge, and the corresponding enlargement of opportunities for advanced study. The College has always been rather exacting, for the respective periods, in its conditions precedent to award of advanced degrees. With the exception of a few honorary degrees none beyond the degree master of science was awarded for many years. Professional degrees in engineering were also conferred, but these do not indicate attainment ranking higher than that denoted by the master of science degree.

DOCTOR OF PHILOSOPHY DEGREE

The College for some years had had many persons on its staff who held the degree doctor of philosophy. The research projects carried on by departments, especially those identified with the Experiment Stations, afforded ample fields for original work of a high order. These conditions led to increasing consideration of the question of the advisability of offering graduate work leading to the degree doctor of philosophy.

The graduate council kept the matter under advisement for several years. President Farrell discussed the question in the biennial report for 1929-1930. It was regarded as important not to introduce work for this degree at the expense of curtailing opportunities for work for the master's degree in which the College occupied high standing. The library facilities were also recognized as inadequate in many fields for the consultation necessary in connection with candidacy for the doctorate.

After years of consideration by the graduate faculty and the Board of Regents the following minute was adopted by the Board, June 2, 1932: "It was moved by Mr. Harris, seconded by Mr. Wilson, that the Kansas State College, Manhattan, be authorized to confer upon students completing the requirements therefor the degree of doctor of philosophy, and to offer in the departments of chemistry, milling industry, bacteriology, and entomology graduate work leading to that degree, this authorization to become effective September 1, 1932. Motion carried."

The first degree conferred pursuant to this action was upon Hugh Stanley Carroll, June 1, 1933, who entered graduate work here with much advanced credit. His major work was in chemistry.

April 8, 1935, the Board voted to add genetics to the fields in which graduate work might be offered leading to the degree doctor of philosophy, effective June 1, 1935.

HONORARY DEGREES

The conferring of honorary degrees to a restrained extent has been continued during this administration, but a distinct advance has been made by the institution of a permanent committee the duty of which is to develop a definite policy in the determination of qualifications for honorary degrees, as well as to make recommendations concerning candidates. Through this committee such a degree may continue to be a real honor, and embarrassment to enthusiastic advocates should be reduced to a minimum.

COMMENCEMENT EXERCISES

Commencement exercises have undergone a certain degree of transformation within this period. This began earlier with the authorization of caps and gowns for the graduating class in 1910. As early as 1902 the class expressed a wish to use academic costume for graduation and other state occasions, but the faculty refused to allow it. When the request was presented to President Waters, he granted it without reference to the faculty. This introduction of academic dress was signalized by a procession of the candidates, faculty, and Board of Regents from Anderson Hall to the Auditorium preceding the commencement exercises. The wearing of caps and gowns by the graduating class, and the academic procession have been commencement features ever since.

ACADEMIC DRESS FOR THE FACULTY

In 1914 the senior class presented a petition requesting the deans of Divisions to wear caps and gowns at the commencement exercises, June, 1915, but the deans considered that the time had not come for the introduction of this custom. In 1919 the seniors in the five divisions were differentiated by the colors of the tassels of the caps.

The senior classes continued the effort to bring the faculty into line, but were unsuccessful in 1923 and again in 1924. In 1926 the Council of Deans unanimously recommended to the faculty adoption of the practice of wearing caps and gowns by members of the faculty who appear on the platform at commencement exercises. The faculty discussed the matter at considerable length and voted to refer it to the Council of Deans with power to act.

The deans decided that standard costume be adopted, and that

deans, department heads, and full professors shall participate in the procession and sit on the platform, and that all other members of the faculty be invited to do so, if in academic costume. This was in effect for the commencement exercises of 1926 in June, and for the summer school commencement in August. These provisions are still followed except for seating members of the faculty on the platform. This became impracticable, especially when the exercises were transferred to the stadium.

PROGRAM TRANSFERRED TO STADIUM

With the great increase in the number of degrees to be conferred, and of those especially interested in the exercises, the inadequacy of the auditorium as a place for the commencement programs has become increasingly evident. After considering its possibility for several years, the Council of Deans decided to hold the baccalaureate and graduation programs in the west section of the stadium in 1934. Alternative plans were made for transferring them to the Auditorium in case of rain.

The average person has no conception of the care in many respects which must be used to produce the harmonious succession of the several features of the exercises of commencement day. The assembling of the three groups—deans, faculty, and candidates—and their union in the academic procession; the orderly procedure of each person to an appointed seat so that later the candidates may reach the stage in the proper order to receive their diplomas; the suitable selection of seating sections for the several groups, and the assignment of the place for each dean so that presentation of candidates to the president may be made with no awkwardness; the perfect arrangement of the diplomas on the registrar's table on the stage; these and many other details require coordination by a master mind or a group. For many years this burden was carried by Dr. J. E. Kammeyer, and it made him nearly a nervous wreck each year.

Transfer of the exercises to the stadium added to the difficulties. Installation of a public address system, which should have been used even in the Auditorium, became a fundamental necessity. Convenient and adequate lights are required, and provision for protection of musical instruments, diplomas, and other material that would be seriously damaged or ruined by rain. In addition to this elaborate preparation for a stadium program, arrangements of a parallel nature are worked out to be used in the Auditorium on two hours' notice.

CHANGES IN PROGRAM

So much of the meticulous preparation required hinges upon provision for the handing of each diploma to the right person that serious discussion takes place annually of the possibility of dispensing with the march of candidates to the stage to receive their diplomas. In that case they would be delivered later from the office of the registrar. The abandonment of a time-honored custom is regarded as a serious matter. Parents who have worked and stinted for years that their children may receive college education, experience a culmination of their hopes in the public appearance of the son or daughter on the platform to receive the diploma.

Since the graduation ceremonies have been transferred to the stadium, the candidate is so far from the audience when he crosses the stage that personal recognition is practically impossible. The traditional intimacy and heart-stirring are almost negligible, and it seems a safe prophecy to say that this feature will be abandoned before many more years pass.

The time-honored annual address in connection with graduation exercises has met reverses because of the length of time necessary for other features of the program. Short addresses by a member of the Board of Regents and by the president suffice. Parallel to this the baccalaureate "sermon" has been rechristened baccalaureate "address," a designation that accords with the tendency to a change in the nature of the event that has been taking place for many years.

The custom of offering a concert by an eminent group or a recital by an individual musical artist, as an event of commencement week especially in compliment to the senior class, was introduced in 1930 on the suggestion of Miss Machir. Although these programs are of a very high order of excellence, and are free to all, the attendance has been disappointing. This apparent lack of interest probably reflects the high pressure of the general situation during the commencement period.

SHORTENING THE COMMENCEMENT PERIOD

A trial is being made of crowding together the programs of so-called commencement week. Formerly they extended from Sunday for the baccalaureate sermon to Thursday for the graduation exercises with the annual address. Beginning with 1935, commencement day has been on Monday. The hope is that with Saturday as Alumni Day, and the other major programs following without intervening days, larger numbers will be able to come from a distance to attend all. The results are hard to gauge. The lack of

respice imposes a physical tax on those who have much to do with the programs, or the entertainment of guests, but at the same time the strain is less prolonged.

THE ORGAN

One of the major additions to the equipment of the College has been the pipe organ purchased in 1931. For many years the need of this had been realized, not only as a facility for the department of music, but as an important adjunct to the educational breadth of the institution.

The department of music while under the headship of Professor Olaf Valley, presented to the public from time to time, concerts and light operas, for admission to which a charge was made, with the avowed purpose of building up from the proceeds a fund for the purchase of an organ. This amounted to \$679.90 when Professor Valley left.

When the Wilson bequest was announced, friends of the organ project saw an opportunity to finance it at once, but there were many other uses for the fund suggested. In 1917 the Board voted to use the Wilson fund, \$20,000, for the erection of a suitable residence for the president, and that the accumulated interest from this fund be combined with fees from the music department for the purchase of an organ as a memorial to Mr. Davies Wilson. About that time the business manager, Mr. James A. Kimball, almost decided to make the purchase but did not do so. The development of war and post-war conditions excluded for a time serious efforts to secure an organ.

When sound motion pictures were perfected and the music accompaniment, if any, was made part of the film, theaters found themselves provided with expensive organs for which they had little use, and they were placed on the market at greatly reduced prices. At this juncture friends of the project for providing an organ for the College Auditorium renewed their activities. The immediate result was to find that the budget for the year was made up and that no funds were available in sufficient amount.

However, to make the purchase, the Board voted to use \$2,000 from the commencement fund and \$5,000 from the fees and maintenance funds to supplement the \$1,022.72, to which the organ fund had grown through interest accumulations up to that time. The organ purchased had been used in the Liberty Theater, Kansas City, Mo., and was supplied by the Kansas City Organ Service and Supply Company at a cost of \$8,000, installed. It is a three-manual Austin instrument, with a detached console electrically operated.

To make available money from the fees and maintenance funds,

the Council of Deans voted to approve an assessment of not to exceed two per cent of the allotments that had been made to the several departments for the year 1931-32. Appropriate reductions were accordingly made, and thus in a sense all departments of the institution cooperated in the purchase of the organ.

STUDENT GOVERNMENT

The organization of students for participation in student government, which began in 1909 with the formation of the Student Council, was developed further as the Student Self Governing Association in 1919. In 1926 a new constitution was adopted and the name changed to the Student Governing Association. The constitution of the association was revised in 1936 and in 1938. In the biennial report for 1927-1928, President Farrell wrote:

The problems of student government, like the problems of government in general, are never solved. The fact that about 1,000 new students enter the College each year, and that virtually all these matriculants are immature, makes of student government an undertaking of great importance and intense interest. The exceedingly rapid changes in economic and social standards and practices intensify the difficulties involved. Theoretically, self-government is desirable, but it is not always effective. In 1919 the Student Self-Governing Association was organized at the College, and it has continued since that time. Its effectiveness has been variable. The association was reorganized in 1926 when its responsibilities for student discipline were increased. Upon the whole the association has been useful, both in dealing with problems of student behavior and in impressing students with governmental phenomena and with some of the requirements for successful government. The plan is still on trial, as it probably always must be, as is true of all forms of government.

The Student Governing Association works through a student council elected by the Association, and the student council and faculty council cooperate. There is really no completely independent power exercised by the student council, and it functions mainly in respect to social affairs, elections, and other matters that are not misdemeanors or crimes. While nominally the council acts upon all charges of misdemeanors except sex irregularities, practically it does very little in the way of correcting misconduct. This will always be the case as long as individual students will not accuse their fellows, and their reluctance to do so is a natural mani-

festation seen also in mature citizens in connection with violations of laws and ordinances of the State or the city.

If, for example, the student body really wished with sufficient earnestness to extirpate cheating in college work, the end could be attained in short order. Students know that cheating is very prevalent; if those having the knowledge would give it to the student council, and prompt trial and adequate punishment followed, the condition would be cleared up at once.

There are, in fact, very few students who would care to serve on a council which would assume the heavy responsibility of actually attending to student discipline, and to giving the necessary time to do the work required by it. Fortunately the great majority of the students are well behaved in a situation in which for the most part each governs himself.

THE CAMPUS

During this period there have been slow but significant changes in the campus and its vicinity. Several small parcels of land have been purchased near the campus or adjacent to previous holdings. Their designations, areas, and prices were: (1) the Moseley tract, 2 acres, \$3,100; (2) the Payne tract, 1 acre, \$1,200; (3) the Hays tract, 2.115 acres, \$2,643.75; (4) the Gish tract, 11.86 acres, \$12,000; (5) the Aye tract, 2.4 acres, \$3,000; and (6) a second Aye tract, 1.6 acres, \$2,000. The first four were purchased on an authorization of the Board of Regents dated July 20, 1925, the fifth on one dated October 1, 1925, and the last on one dated June 25, 1927. The first three were purchased for use by the departments of entomology and botany, the fourth for the department of poultry husbandry, and the last two for the department of agronomy. Most of these purchases were made in order to transfer land on the campus proper to the department of physical education and athletics, for use as athletic fields.

Much improvement has been made in the roads and walks on the campus. In 1929 the legislature designated that \$12,000 of savings accumulated in the dormitory operating fund should be used for "campus roads, walks, and drives." This provided concrete or gravel paving for roads leading to Van Zile Hall and a stone arch bridge across the watercourse to the southwest of that building.

In 1931 the paved roads were widened in the vicinity of Anderson Hall, and the paved parking space east of Kedzie Hall removed. The graveled road passing north of Calvin Hall and between Kedzie and Fairchild halls was abandoned. About the same time the road west of Calvin Hall was given cement paving instead of



FORMAL GARDEN EAST OF THE PLANT MUSEUM CONNECTED WITH DICKENS HALL

gravel, relief labor from Manhattan being used on materials furnished by the College.

The road east of the stadium was provided in part by the use of employment-relief labor. The curbing was placed in the spring of 1932, and the roadbed in March and April, 1934. The road east of Education Hall was paved in April and May, 1934, and extended north to the public road.

The stone walls about the old College farm and the present campus have always attracted attention. The workmanship in building them was not always all that could be desired, and relaying of parts has been necessary. The original wall about the campus, laid in 1873, required considerable repair within ten years, and in 1883-84 the part between the Vattier Street entrance and the southeast corner was relaid. In 1886 the relaying was extended north to Lovers Lane.

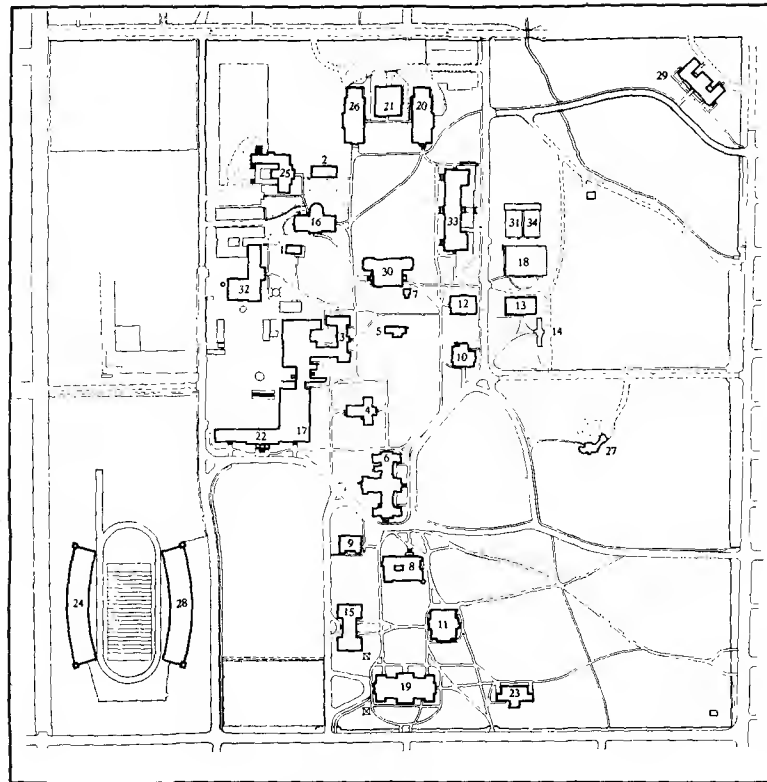
In 1925 massive stone gate posts were erected at the Bluemont Avenue entrances and a similar structure placed at the southeast corner of the campus. The wall between the corner and Bluemont Avenue was again relaid, and was made somewhat lower and with a flat top set in cement.

With location of Van Zile Hall on the northeast corner of the campus the improvement of the environment became imperative. The stone wall on the east was relaid from the corner south to the ravine, and on the west from the corner to the limit of the grounds and drives of the locality.

In 1930 the wall near Thompson Hall and south of Nichols Gymnasium was relaid, and incidentally fine connections were made with the gate posts near Thompson Hall erected by the Class of 1911. The next year the relaying was continued east to the corner and west to the tennis courts. At that time gate posts donated by the Class of 1916 which had been unwisely placed on the athletic field were moved to the entrance southwest of the gymnasium.

Additional replacement of the wall on the north side of the campus has been made. All the recent rebuilding has been of a higher order of workmanship. The top of the wall is flat and laid in cement. Because of having been built too far out, the wall along the west side of the campus was removed, and has not been replaced.

The experience of the College with streetcars was only partially satisfactory. A Manhattan company ran cars to Anderson Avenue for the first time commencement week, 1909, regular service beginning June 13. In 1914 the cars were admitted to the campus at a point opposite Seventeenth Street. The tracks extended to the area which now has the Library on the east and the Power Plant on the



MAP OF THE MAIN CAMPUS

Map showing location of buildings, walks, and roads on the campus in 1939. Buildings are numbered in the order of their erection. For this map the author is indebted to the courtesy of Mr. Geo. R. Pauling, superintendent of maintenance.

1. College Hospital, originally built as a residence by Mrs. N. O. Preston in 1866 and used as a residence by College presidents, professors of agriculture and the custodian, succession.
2. Farm Machinery Hall, erected as one wing of a barn in 1873. It has been used for many purposes.
3. The part of the shops erected in 1875, to which additions have been made several times.
4. Mathematics Hall, erected as a chemical laboratory in 1876. It has been altered several times, and in 1939 was much changed to adapt it to the use of the department of mathematics.
5. Illustrations Hall, originally erected for horticulture in 1876.
6. Anderson Hall, erected 1879-1884.
7. Nurses' quarters, erected in 1888 for entomology and horticulture offices and laboratory.
8. Fairchild Hall, erected for the library and agricultural science in 1894, enlarged in 1903, and remodeled in 1927.
9. Kedzie Hall, erected for home economics in 1898 and now used for English, journalism, and printing.

west, where it terminated in a loop. This track was used by passenger cars and also for delivery of coal in car lots.

The rapid increase in the use of automobiles reduced passenger patronage, and the adoption of gas as fuel for heating at the College still further diminished the income of the streetcar company. November 25, 1928, the streetcars were replaced by busses, and April 20, 1931, the company was authorized to remove all tracks and switches from the campus, and the appearance of the grounds was thus greatly improved.

The prolonged deficiency in rainfall beginning with 1932 has had a disastrous effect upon campus plantings. Hundreds of trees have died. Some of these had passed their prime, but a distinct damage to the grounds has been suffered. Shrubbery and vines have not altogether escaped, and some orchard plantations have been practically ruined. The dead trees have been removed and new plantings made, and visitors may be unaware of the damage that is under repair.

BUILDINGS

Though much of the period has been one of financial distress in the State, the campus has registered progress through the addition of several important buildings.

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10. Education Hall, erected in 1900 for agriculture.
 11. Auditorium, erected in 1904.
 12. Erected as Dairy Hall in 1904, this has been used for chemistry since 1923 and is now Chemical Engineering Hall.
 13. Dickens Hall. This houses horticulture and botany. It was erected in 1907.
 14. Plant museum, erected in 1907.
 15. Calvin Hall, erected for home economics in 1908.
 16. Veterinary Hall, erected in 1908.
 17. Engineering Hall, east section, erected in 1909.
 18. Greenhouses, built in 1910.
 19. Nichols Gymnasium, completed in 1911.
 20. Waters Hall, east wing, erected in 1913.
 21. Stock judging pavilion, erected in 1913.
 22. Engineering Hall, central and west sections erected in 1921.
 23. Thompson Hall, erected in 1922, used for institutional economics.
 24. Memorial Stadium, west wing, built in 1922.
 25. Veterinary Clinics Building, built in 1923.
 26. Waters Hall, west wing, erected in 1923.
 27. Residence for the president, built in 1923.
 28. Memorial Stadium, east wing, built in 1924.
 29. Van Zile Hall, a residence for women students, erected in 1926.
 30. Library, erected in 1927.
 31. Greenhouses, built in 1927.
 32. Heat, Power and Service Building, erected in 1928.
 33. Physical Science Building, erected in 1939.
 34. Greenhouses, erected in 1939.



AIRPLANE VIEW OF MAIN CAMPUS

This airplane view of the campus is provided through the courtesy of Mr. Harry W. Bouck, secretary of the Manhattan Chamber of Commerce. It is taken looking toward the southwest and shows all the buildings on the main campus excepting the pump house in the southeast corner.

VAN ZILE HALL

The provision of a residence hall for women through the unflagging efforts of the women of Kansas, culminating in the erection of Van Zile Hall, has been mentioned among the accomplishments of the Jardine administration though the construction of the building was not completed until 1926. The usefulness of this building is such that on May 31, 1938, all the rooms had been engaged for the semester to open in September. In the thirty-seventh biennial report of the College, 1936-1938, President Farrell requested authority to construct and equip an additional hall to be financed by a bond issue to be paid by the net operating returns from the two halls.

LIBRARY

One of the great needs of the College was met temporarily by the erection of part of a building for housing the library. The



LIBRARY

This building for the library was erected in 1927. The portion shown faces the west and is only part of the building as planned. Ultimately a wing on the south will be constructed balancing that shown on the north.

structure provided is about one half of that which is planned for the building to be completed when needs of the future become imperative. Its fire-proof construction and architectural beauty

both inside and outside make the Library one of the finest features of the campus.

The significance of the Library was recognized by holding formal exercises in laying the cornerstone, June 2, 1926. Regent C. M. Harger made an address which was an excellent example of his ability to combine substance of thought, beauty of composition, and inspiration to nobler and fuller living.

The prodigious task of removing the library from Fairchild Hall, and installing it in its new quarters, was carried out during the summer of 1927. January 10, 1928, a formal opening reception was given with a short address by President Farrell. On the walls of the exhibition gallery there was a display of more than 100 paintings and prints by Dr. Birger Sandzen, of Bethany College, Lindsborg, Kansas.

President Farrell's scholarly address was permeated with the spirit of the universality of the appeal made by a library, and the toleration therein of all utterances of the thinkers of every age in the widening realms of science, religion, literature, and art.

FAIRCHILD HALL REMODELED

The removal of the library from Fairchild Hall the summer of 1927 set free much valuable space for other purposes. Using an appropriation of \$24,000, extensive changes and additions of partitions were made, creating classrooms, laboratories, and offices by means of which the departments of history and government, entomology, and zoology and geology were given much more ample quarters.

HEAT, POWER, AND SERVICE BUILDING

The housing of the power plant through the history of the College since steam heat was first used in 1882 had been by successive additions to existing quarters which resulted in the production of an inconvenient and inefficient assemblage of rooms, bins, tanks, furnaces, boilers, and equipment. In later years purchases of boilers were made with a view to their future removal to a modern power plant building.

The legislature of 1927 made an appropriation of \$150,000 available in 1927-28, and another of \$165,000 in 1928-29, for the replacement of the old plant. These appropriations enabled the College to erect and equip a modern heat, power, and service plant which is served by smokestack No. 3, 202 feet in height, and with a diameter of 18 feet and 4 inches at the bottom. This building is northwest of the shops, and placing it there required the removal of barracks No. 5, the wartime mess hall, and also barracks No. 1

and part of No. 2. The building is 122 x 210 feet in ground dimensions and three stories in height. It occupies the west side



HEAT, POWER, AND SERVICE BUILDING

This building was erected in 1928. With the equipment its cost was \$375,000. It furnishes heat and power for the entire campus. The water tower is shown at the left.

of a quadrangle, with the library building to the east, the shops to the south, and Veterinary Hall and the College Hospital to the north. It not only is constructed for convenience of service, and long life, but makes a presentable appearance.

Location of the power plant at that point has some disadvantages, and required the abandonment of an earlier plan to locate it in the low land southeast of Waters Hall. The earlier plan was recognized in a somewhat anticipatory bird's eye view of the campus issued in 1924. This picture was widely circulated in high schools and elsewhere, and illustrates the inadvisability of issuing views embodying features that exist only in the hoped-for field. Some other items in that picture will never be constructed, though in the main it is a truthful as well as an attractive representation.

BARNs

The location of the dormitory on the northeast corner of the campus made it necessary to remove three small double barns used for experimental feeding of cattle, and the sheep barn. The last was succeeded by a temporary structure across the road to the north. Its unsatisfactory service came to an end in 1927 when a commodious barn was erected to the north, a short distance east of the horse barn. The legislature of 1925 appropriated \$10,000 for this purpose.

DAIRY BARN

In respect to facilities for the housing of animals and the production of milk, the department of dairy husbandry had been falling behind the standards exemplified in several other land-grant



OLD DAIRY BUILDINGS

This view taken about 1933 shows the old dairy barn and associated buildings which were razed or moved to the vicinity of the new dairy production plant erected in 1933.

institutions. The activities of the department are not limited to routine milk production, but include accurate experimentation in this industry. The wooden shell, constituting the dairy barn, had been in use more than thirty years, and, with its several related buildings, was within 25 feet of Waters Hall, on a part of the campus which should be free from structures of that type.

The legislature of 1931 made an appropriation of \$60,000 for the year 1932-33, for the erection of a dairy barn and experimental plant. The restraint in expenditure of appropriations described elsewhere in this book led to the decision to use only \$45,000 of



DAIRY PRODUCTION PLANT

This is a view of the building for dairy production and experimentation, erected in 1933. In the interest of economy, only three-fourths of the appropriation made for this building was used, and wooden buildings moved from their old sites are used to meet the deficiency.

the amount intended to be available. Some parts of the structure as planned were omitted and part of the old buildings moved to the new site for temporary use.

The building is located at the west side of the dairy pasture north of the road along the north side of the campus, and is thus situated at a considerable distance from any of the other College buildings. Milk that is to be further handled by the College is brought to the basement of the west wing of Waters Hall, where all the processes of dairy manufacturing are carried on.

ADDITIONAL GREENHOUSES

The legislature of 1925 appropriated \$10,000 for construction of greenhouses. Two, each 30 x 100 ft. in size, were built and equipped with refrigeration machinery, brine tanks, low temperature rooms, and hardening rooms, which enable the departments of agronomy and botany to investigate problems of winter hardiness of crop plants, and of plant diseases. Two additional sections 29 x 100 ft., and a headhouse 20 x 126 ft., with necessary equipment were provided in 1938 by an allowance of \$15,000 from Bankhead-Jones funds and \$10,000 from other Experiment Station funds. This block thus became somewhat comparable in size with the older block of greenhouses to the south, next to Dickens Hall.

LOSS OF DENISON HALL

The College suffered the most serious loss in its history the night of August 3, 1934, when Denison Hall was totally destroyed by fire. The fire was well under way when discovered about 10:30 o'clock, and two units from the Manhattan fire department which arrived promptly could do nothing to save the building and were fully occupied in protecting adjacent buildings. Anderson Hall, Education Hall, and Chemistry Annex No. 1 were very close to Denison, and only the lack of much wind made it possible for the fire-fighters to prevent the spread of the catastrophe. Burning fragments drifted to some distance, and the College Hospital caught fire, but the blaze was soon extinguished. Scores of employees of the College and other citizens of Manhattan were very helpful in controlling the widely dispersed sparks.

The department of physics, housed in the west end of the building, lost literally everything except a little apparatus that was in use elsewhere. Among the losses were the meteorological records which began in 1858, and apparatus of historical interest.

The chemistry department was not so completely wiped out, as much of the work was being done in Chemistry Annexes Nos. 1 and 2. Number 1 is the old chemistry laboratory erected in 1876, burned in 1900, rebuilt in 1901 for use as a woman's gymnasium, and in 1911 remodeled inside and returned to the service of chemistry for the freshmen. Chemistry Annex No. 2 was built for the dairy department, and was turned over to the chemistry department when the work in dairy manufactures was installed in the west wing of Waters Hall, 1923. Much of the chemical work in industrial chemistry and chemical engineering is done there. These two buildings and their contents were very important residues of the means for instruction in chemistry. Officers of the department of chemistry succeeded in carrying some manuscripts and apparatus out of Denison Hall, and a fire-proof vault yielded in perfect condition valuable records and some costly apparatus.

Temporary provision for much of the chemical work in instruction and research, and for instruction in physics, was made in Waters Hall, to the great inconvenience of all concerned. The large lecture room on the second floor of West Waters Hall became the chemistry lecture-room, and physics was provided for in the basement.

PHYSICAL SCIENCE HALL

The prospect of waiting until the meeting of the legislature in 1935 for an appropriation for a new building was a dreary one. A year or two more would be required to erect the structure. Kansas

was in bad financial condition, for crop failure was added to the general national depression. When 1935 came, the legislature made no appropriation. Possibly an inadequate one might have been made, but some other institutions were not willing that an accident to Kansas State should be repaired unless something additional should be done for them. So the possibility drifted two years farther away.

In 1937 it seemed to be generally conceded that a building would be allowed, but when a bill was passed which included an item of \$250,000 for this purpose, it carried conditions that led Governor Huxman to veto it and two other items. That was February 18. The governor insisted that he favored an appropriation for this purpose and would sign a proper bill providing for it. He and the legislature were somewhat at loggerheads.

The journalistic organizations, Sigma Delta Chi and Theta Sigma Phi, staged a demonstration in the ruins of the basement of Denison Hall, satirizing the alleged sacrifice of Kansas State College to the political expediencies of Governor Landon and Governor Huxman. The journalistic men pledged that a guard would camp out on the ruins until an appropriation was made or the legislature adjourned. A demonstration of that sort may easily do more harm than good, but Governor Huxman and the members of the legislature took this one in good part, and probably it did no harm, and perhaps not as much good as those participating in it thought.

When the regular appropriation bill for the State educational institutions came up for final action, it carried items for a physical science building and equipment of \$250,000 available in 1936-37; \$150,000 in 1937-38; and \$50,000 in 1938-39; a total of \$450,000. This was signed by Governor Huxman, and was a much better provision for the situation than was made in the vetoed bill.

However, plans were not ready to take advantage of the 1936-37 dating of the principal sum, and, although it remained available later, building costs were rising, and it became evident that, large as was the appropriation, it would not be sufficient to enable the College to carry out the plans. At this juncture an application was made for a grant of funds by the Public Works Administration, though the prospect for success was not very rosy. In the interest of the State through the College, Governor Huxman made a trip to Washington to support this and other applications for grants, and went directly to President Roosevelt. This interview was probably "off the record," but the College received an allowance of \$272,533.81.

Excavation for the building began December 9, 1937, and

favorable weather conditions prevailed to such an extent that it was ready for occupancy, August, 1939. Its extreme dimensions are 91 x 305 feet. It is three stories above the basement in height, and has much dark space besides in the attic. It is one of the largest buildings on the campus and the most modern in its construction and appointments.

The physical science building forms the east member of a quad-



PHYSICAL SCIENCE BUILDING

This building, completed in 1939, houses the departments of chemistry and physics. Its erection was occasioned by the burning of Denison Hall, but was very much delayed.

range, the Library being on the south, Waters Hall on the north, and Veterinary Hall on the west. The mason work is the most beautiful on the campus. The stone is from the immediate locality except the trimmings which are from Indiana. By common consent the building is referred to as Willard Hall by students and faculty.

SURVEYS

COMPREHENSIVE SURVEY OF THE LAND-GRANT COLLEGES

This administration has had the experience of several studies of the College in the nature of surveys or general reviews of progress or conditions. One of these was as a unit in a survey of 69 land-grant colleges and universities, including 17 institutions for Negroes. This survey was made at the request of the Association of Land-grant Colleges and Universities, by the Office of Educa-

tion, Department of the Interior, and was directed by Dr. Arthur J. Klein of that office. It was undertaken July 1, 1927, and completed June 30, 1930.

The survey was undertaken as a "National study of the accomplishments, the present status, and the future objectives of the land-grant type of education, and not a collection of surveys of individual institutions." A national advisory committee of ten was formed representing in a general way the organizations interested in these institutions, the institutions themselves, and the major phases of their activities.

The director of the survey made a preliminary study by visiting 38 of the land-grant institutions and having conferences with about 700 presidents, deans, directors, professors, and other officers, concerning problems to be studied and personnel deemed most competent to be in charge. As a result of this preliminary work, the problems for study were classified under 19 general heads: control and administrative organization, business management and finance, work of the registrar, alumni and former students, student relations and welfare, staff, library, agriculture, engineering, home economics, arts and sciences, commerce and business, teacher training, military education, professional veterinary education, summer session, extension service, research work, and graduate work.

The funds available did not permit the employment of staffs to visit the institutions and collect data in these fields, and a co-operative method through the use of questionnaire blanks was adopted. For assistance in formulating the questionnaires and in reviewing tentative reports in the several fields, fifteen committees upon subject matter and functional fields were selected and organized by the commissioner of education.

Kansas State College was represented on these committees by Dr. Margaret M. Justin, on advisory committee on home economics; Dr. Edwin L. Holton, professional education of teachers; Dean Leland E. Call, agricultural research and experiment station work; and Dean Roy A. Seaton, engineering. Besides these faculty members, President Harry L. Kent, of the New Mexico College of Agriculture and Mechanic Arts, a graduate and former member of the faculty of Kansas State College, in a measure represented this College on the committee on student relations and welfare.

Direct contact with Doctor Klein was effected through local committees at the several institutions. At Kansas State College this committee consisted of: F. D. Farrell, Margaret M. Justin, R. A. Seaton, R. R. Dykstra, Harry Umberger, J. E. Ackert, E. L. Holton, J. T. Willard, and L. E. Call, chairman.

The director of the survey in putting the matter collected into

final form consulted members of a general staff of 85 men and women among whom were the following members or former members of the faculty of this College: L. E. Call, Nina B. Crigler, E. C. Johnson, Margaret M. Justin, A. A. Potter, and P. H. Ross.

The foregoing sketch of the organization of this survey should show that the results obtained were of an authoritative character. About 80,000 pages of questionnaire returns were received, tabulated, and indexed. This mass of authentic material was the basis for extended discussion of the score or so of main topics. Each of these ended with a chapter of conclusions and recommendations. These cannot be touched in this volume. The report of Director Klein was published in two volumes as Office of Education Bulletin (1930) No. 9, and occupies 1,920 pages. These volumes constitute an unrivaled source of information concerning the land-grant colleges. The several parts and chapters are well written, highly informative, and register judicial consideration and expression. They will be valuable for many years to teachers and administrators in these institutions, and to students of the field and problems of education.

COMPILATIONS FOR SOCIETIES

Many compilations of information concerning the College have been made which were more or less in the nature of surveys. The simplest were with reference to establishment of chapters of fraternities or sororities. Much more extensive and rigorous were inquiries made precedent to the introduction of chapters of honor scholastic organizations in limited fields, or general ones such as Phi Kappa Phi and Sigma Xi.

A detailed presentation in many lines was demanded before the College was accredited by the American Association of University Women in 1923. Membership in the North Central Association of Colleges and Secondary Schools was not granted until 1916 after certain academic standards had been met. Recognition by graduate schools of individual universities had also required the furnishing of evidence of satisfactory educational standards and accomplishment.

Probably the most complete presentation of the type and quality of the work of the College was in connection with its application for accrediting by the Association of American Universities. Application was made in 1926, and data required were furnished the next year. A final personal inspection of the College was made on behalf of the Association of Dr. David A. Robertson. Following his report, and on recommendation of its committee on the classification of colleges and universities, the Association placed the

College on its approved list of technological institutions, November 17, 1928.

These frequent demands for evidence have had the effect of keeping the administrative officers scholarship-conscious constantly. In this connection emphasis may be placed on the great value that inquirers attach, not only to formal accrediting, catalogue announcements, and classes scheduled, but to the evidence of successful work by graduates of the College as students, teachers, or investigators in other institutions. The alumni are unconscious ambassadors to the world, and the high standing of the College is due to the fine work done by its graduates.

REPORT TO THE LEGISLATURE

The legislature of 1933 incorporated as section 9 of the appropriation bill for the support of the five state schools the following provision:

The Board of Regents is authorized and directed to make, or cause to be made, a thorough survey of the institutions under its management, to acquaint itself with the experience of other states in the administration of their educational institutions, to advise with citizens of Kansas most interested and most competent to assist in the solution of the problem of State support for higher education in Kansas, also to consult with expert educators outside the State; and to report to the legislature at its next regular session a plan for the unification, coordination, and cooperation of said educational institutions so that duplication of effort not absolutely necessary, and all competition between said institutions, shall be eliminated, to the end that the best possible facilities for higher education may be afforded the youth of Kansas at the least possible cost to the State. In the meantime, and until such general plan for unification and coordination of the work of the several institutions shall have been formulated and adopted, the Board of Regents is expected, as conditions permit, to reduce the extent of duplication of instruction as now carried on by the different institutions.

The people of the State were keenly aware of hard times for farmers, and this legislature had charged off nearly \$3,000,000 which the legislature of 1931 had appropriated to the State institutions, and the perennial allegation of duplication in the State educational institutions was again seized as a situation by the end-

ing of which an economy might be effected. Previous surveys were ignored, perhaps not even known to have been made.

The economy objective was so strong that no appropriation was made to cover the cost of such a survey. When the Regents took up the matter of compliance with the requirements of the legislature, the non-existence of supporting funds became apparent. After receiving from the attorney general an opinion that funds of the institutions could not be used to cover the cost, the Board finally called upon the heads of the five schools to confer, and do the best that they could to meet the situation. Conferences were held, and from their results, and the knowledge possessed from experience and action, the Board prepared a "Report of the Board of Regents on the State Educational Institutions to the Legislature of 1935." In this report the Board recommended that an appropriation be made "sufficient to enable the Board to cause to be made a complete and impartial survey of State-supported higher education in Kansas." The Board referred to previous requests for certain action in the interest of improvement which had not met legislative support, including provision of a thoroughly qualified executive secretary, and the establishment of a pension system for faculty members.

The Board in its report discussed in a broad way the relations among the five State-created and State-supported educational institutions, and the difficulty of altering the system at this late date, and was of the opinion that Kansas was similar to other states in respect to such institutions.

The problem of duplications was again carefully investigated, and duplication in certain fields of study "such as English, mathematics, history, the sciences, and languages" was recognized as unavoidable. Engineering, journalism, professional education, and extension courses received special treatment in the report. Existing differences at the several schools in their occupancy of these fields were presented, as well as the completeness of use of facilities. Some recommendations were made looking toward greater differentiation especially in the courses offered in education.

The Board evidently considered that consolidation of institutions would not be of advantage, and that complete segregation of activities is impracticable. It was seen that the young people of the State are better served by a certain dispersion of opportunities through having institutions in different parts of the State. The report is concluded by the following paragraph:

At present the country is being swept by a certain hysteria due to the depression and the great problems of the tax payers, which later will subside. We should not permit

ourselves to allow our educational institutions, which have been built up through the tedious work of generations, to be adversely affected by temporary economic difficulties. After all, the most valuable possession we possess is our children, and as many of them are seeking education as ever. We owe them the best possible opportunity of obtaining a training for life.

A TWENTY-YEAR PROGRAM

On the initiative of President Farrell, the Council of Deans, March 19, 1934, instituted an enterprise the object of which was to assemble and organize individual suggestions and opinions in respect to the direction and form that development of the College should take during the next twenty years. On April 10, 1934, the general faculty discussed the project and voted unanimously to carry it forward. Faculty, employees, alumni, students, and others participated in this study and contributed constructively to the total body of suggestions and plans submitted. Probably no other project of the College as an educational institution has created as much interest, or elicited as much thought and cooperation, as did this, or developed such a realization of the potential cooperation of the College personnel.

May 1, 1934, the president sent an outline of the project to the deans, department heads, and chairmen of standing committees, with suggestions concerning procedure in carrying it out. A large number of special committees were appointed by the president or deans to study particular aspects of the subject, and the cordial cooperation of selected alumni and students was obtained. Most of the reports were submitted in December, 1934, and the remainder previous to April 30, 1935. These reports of programs occupied 890 typed pages.

It seemed desirable to print the results of this study, but to do so completely was impracticable, and the Council of Deans agreed: "(1) That each dean should bind his departmental and divisional reports for his own files; (2) that the President should bind the reports of all departments, divisions, and committees for his files; and (3) that the president should prepare, or have prepared, for publication as a bulletin, a summary of the plan to fill about forty-eight printed pages."

SUMMARY BY THE PRESIDENT

The summary prepared by President Farrell was printed as a number of the *Kansas State College Bulletin* under the subtitle "A Twenty-Year Program for Kansas State College of Agriculture

and Applied Science." The scope of the project cannot be indicated more briefly than by quotation of the table of contents as follows:

Limitations of the Program.

Historical Note.

Basic Philosophy.

The College and Its Relationships. With State Officers, With other Colleges and Schools, With the Federal Government, Intramural Relationships, With Students, With Alumni, With Commerce and Industry, With the General Public.

Faculty Personnel. Training and Efficiency, Salary Scale, Retirement Policy, Teaching Loads.

Institutional Organization. Departmental Consolidation, Divisional Consolidation, Consolidation of Administrative Offices.

Development of a Rural Philosophy.

Student Health.

Dean of Women.

Spiritual Welfare of Students.

Illustrations Department.

College Post Office.

Registrar's Office.

Vice-President's Office.

Alumni Association.

Reports of Committees. Admission, Advanced Credit, Assignment, Athletic Council, Calendar, Catalogue, Campus Chest, Examinations, Faculty Loan Fund, Major Musical and Dramatic Entertainment, Public Exercises, Reinstatement, Relations with Junior Colleges and Art Colleges, Student Affairs, Student Honors, Vocational Guidance, Campus Development, Faculty Retirement Policy, Fees, Publicity, Radio, Student Loan Funds, Upper Division-Lower Division Organization.

Programs of the Divisions. Agriculture and Agricultural Experiment Station, Engineering and Engineering Experiment Station, General Science, Home Economics, Veterinary Medicine, Graduate Study, College Extension, The Summer School.

Pages 6 to 14 are especially interesting as, though briefly expressed, they embody the ideas of President Farrell in respect to the general administration of the College, its proper scope, and the direc-

tion that development should take. In the paragraphs on basic philosophy, he condenses statements made in an address before the Alumni Association at the annual banquet May 30, 1934, and included in the thirty-fifth biennial report of the College, 1933-1934, pages 22-24. In this report he frankly stated that those principles had been laid down as "guide posts" in the development of the twenty-year plan. Because of this, and, more importantly, because they state the matured judgment of one who had been president for eleven years, and for many years before had been closely identified with the educational activities of land-grant colleges, they are reprinted as follows:

1. *Continued Fidelity to the Basic Ideals of the College.*—The College was established and is maintained for a definite general purpose. This purpose was stated in the original land-grant college act of July 2, 1862: "to promote the liberal and practical education of the industrial classes in the several pursuits and professions in life." The College would be unfaithful to its basic ideals if it provided only the so-called liberal education, or only the so-called practical education. It must provide both, the liberal and the practical, and seek to combine the two to the highest practicable degree. In this essential respect the land-grant colleges have a mission that is peculiar and unique. The greatest usefulness of Kansas State College will result not from attempts to imitate other types of colleges, but from vigorous development of the opportunities that are peculiar to a land-grant college. This development requires continued fidelity to the basic ideals of the College.

2. *Increased Concentration.*—A tendency to excessive horizontal expansion is one of the most serious defects of American colleges. Most of these institutions undertake to do more than they are able within their limitations of funds, equipment, and personnel to do well. Kansas State College is not immune from this tendency. Like most other colleges it would benefit from a consistent treatment of discriminating concentration. Such concentration calls for fewer and better curricula; for fewer and more comprehensive courses; for better teaching and more painstaking research; in short, for better quality obtained, perhaps, at some sacrifice of quantity and numbers. If the College is guided by this principle it will seek to improve its present major offerings rather than to add new ones. It will strengthen its work in agriculture, engineering, and physical and biological sciences, and its other major fields rather than establish a de-

partment of Sanskrit. It will develop vertically rather than horizontally. It will enrich its own unique possessions rather than to covet the possessions of other types of colleges.

3. *Increased Liberalization.*—The College has paid too little effective attention to that part of its original charter—the act of July 2, 1862—that requires it to provide liberal as well as technical education. Most of the curricula quite properly are predominantly technical and always should be so. But as surely as the College is obligated to emphasize technological education it also is obligated—legally, morally, and educationally—to provide abundantly for the liberal training of its technological students. In providing as much training as it now offers in music, art, the drama, literature, and other liberalizing subjects, the College has moved in the right direction. But it has not gone far enough in that direction.

The College needs to build up a rich collection of paintings, statuary, and other works of art. It needs better facilities and increased support for dramatic and musical activities. It needs improved gymnasium facilities, particularly for women students, and greatly increased facilities for outdoor play for both men and women. It needs tens of thousands of additional books for the Library. These and other similar needs must be supplied if the College is to make possible for each of its students “the education of the whole man”—his mind, his body, and his spirit—which is the only genuine education. The need for liberalization of technical education increases with the growing complexity of civilization and with the enlargement of leisure among the general population.

It is hoped that the gratifying interest and enthusiasm of the faculty and the generous assistance of graduates and other friends of the College will make it possible to develop a twenty-year program, shaped by the three principles just stated, that will greatly increase the usefulness of the College to the public by which it is supported.

Following the basic philosophy paragraphs were the president's analyses of the relationships between the College and State officers, other colleges and schools, the Federal Government, the students, the alumni, commerce and industry, and the general public. In respect to faculty personnel he looked forward to improved training and efficiency, enlargement of the opportunity for sabbatic leave of absence, more generous salaries, and the establishment of a sound retirement policy. In respect to carrying on the work of

the College, the president expressed himself as committed to the principle of having a minimum of organizational units, operating as simply as possible.

The suggestions of the regular and special committees were more than 100 in number, and those submitted by the several Divisions of the College were: agriculture, 38; engineering, 29; general science, 56; home economics, 21; veterinary medicine, 20; graduate study, 6; and college extension, 17. These cannot be given detailed attention here, and it should always be kept in mind that these suggestions do not at all represent features definitely adopted by the Board of Regents or other authorities. They are, however, expressions of judgment by hundreds of persons whose thinking on the subjects extended over several months, and are worthy of serious attention whenever developments of the institution in any area of its functions are under consideration. They are already functioning in this way and have influenced action. Some of the suggestions are inconsistent with each other or antagonistic, and may reflect intra-institutional rivalries, or differences in point of view.

One of the most interesting reports was that of the special committee on campus development. Members of this committee gave much thought to this subject, and the report includes a double page cut showing what seemed to them to be the most practicable plan of development.

It is unfortunate that those responsible in the early days did not have sufficiently clear vision of the future. Those whose foresight is clarified by a quarter- or half-century of history find their most serious impediment to action to be the existence of expensive structures that are so placed as to prevent development in the newer lines unless they are removed. It is a practical fact that legislatures are seldom willing to raze good buildings in order to make way for better ones, or a better arrangement.

The procedure suggested by the committee probably avoids removal of valuable structures to as great an extent as is feasible, and it should be possible to correct errors of the past, even if only gradually. Naturally the plans of this committee look ahead far more than 20 years.

On the whole the conception of creating a twenty-year plan, and its formulation through the cooperation of so many groups and individuals, constitutes one of the prominent accomplishments of this administration.

GROUP INSURANCE

One of the finest features developed during this period is a plan for group insurance provided through the "Teachers and Employees

Association," a corporation organized under the laws of the State of Kansas. The Association made a contract with a standard insurance company, and the policies became effective May 2, 1928. All teachers and employees on a yearly tenure were entitled to participate at that time, but none was required to do so. No medical examination was required. The number who joined was 204. Applications by others for membership may be made at any time, but acceptance is subject to successfully passing a medical examination, except that a new member of the faculty may join without medical examination at any time previous to November 1 following the date of entering upon his position. The membership in the Association has remained at about the same level, with a tendency to increase, and in 1939, was 234.

The premiums payable are collected monthly by taking them from the pay checks, and the total amount due the company is remitted to it in one check. The amount of insurance provided in each case is fixed, and based on the annual salary. For the assessment of premiums the Association is divided into five age-groups. The rate per thousand dollars of insurance is twice as high for those in the oldest group as it is for those in the youngest group. The rates for intermediate groups are proportionate to these.

One of the objects in forming the Association was to encourage members of the faculty to make some preparation for dependents through insurance. Some pathetic instances of failure to make such preparation were of record. A number of deaths of members have occurred, and the claims in every instance have been paid very promptly by the company. By a later arrangement it has been possible to have a death claim paid in installments instead of in a lump sum.

The success of this Association led to the formation of another which is designated as the "Mutual Benefit Association of Kansas State College," and provides for health insurance and accident insurance. This was chartered June 16, 1937, and was organized, effective July 1, 1937, and has already demonstrated its usefulness. An age limit of 70 years is a feature of this Association. It had a membership of 160 in 1938, 101 of which were also members of the other organization. It makes an appeal to many who need personal protection covering sickness and accidents, but who have no dependents making life insurance needful.

TRAVEL BY COLLEGE OFFICERS

It is manifest, from the very nature of their duties, that some employees of the College must do more or less traveling in the State. This is especially significant in respect to most of the members of

the Division of College Extension, and reimbursement for necessary expenses is a matter of course.

The situation is not always as simple as it might seem, especially since travel by automobile has become so general. Auditing officers have concerned themselves with decisions as to the proper mileage allowance to be made to those using their own cars for transportation of one or more. They have also placed limits upon expenditures for meals and lodging, and, by requirements that receipts must be submitted covering all expenses, have sought to safeguard the public treasury. All this is necessary in a general way, but irritating in its immediate application.

In addition to travel which is a part of the job, it is often advisable for trips to be made by College officers in the transaction of College business, or in the interest of the institution more or less directly. In the early years of its history there was little need for this, and travel at the expense of the College was an unusual event, and one often highly prized.

In those days if a professor attended a meeting of the Association for the Advancement of Science, for instance, he did so at his own expense, and such attendance evinced to a material extent his interest in self-development, and in keeping abreast with progress in his own field. Unfortunately, salaries did not seem to permit such action in most cases.

Attendance at scientific, professional, and vocational meetings by faculty members is not only developmental for those who attend, but the benefits carry over to the College through them in improvement of their service. Study of situations shows that, through minute gradation, there is an unbroken series from those in which travel is purely for performance of College business, to those which are of advantage to the individual only. The place of any individual instance in this series may be determined by the position or attitude of the one permitted to travel. Usually the head of a department has had this privilege, even when it might have been of more value to the College if a subordinate member had been sent.

Authorization of travel at College expense is thus a delicate matter to administer. Except for actual direct service to the College, it would be best for salaries to be such that each faculty member might assign some of it to self-improvement by travel to attend meetings, or to study important situations. Those who did not so use any part of their salaries might be marked as unprogressive and subject to replacement. The great distance, usually, from the College to the points to which the individual must travel adds to the importance of this problem. In the course of decades the institutional policy has developed in rather liberal lines, the chief point

of weakness being the relatively small number of persons who receive the benefits.

LIMITING TRAVEL AT COLLEGE EXPENSE

As early as 1929 President Farrell asked the deans to provide him with rather restricted but inclusive lists of associations and societies to which the College should send official representatives, and to make recommendations concerning other meetings. In respect to the latter type, the practice became more general to allow only partial reimbursement. This is logical in that since the benefit from the trip is divided between the College and the individual, the cost of it may also be divided. This takes the form frequently of payment of railroad fare, with or without sleeping car, while the traveler meets the expense for hotels and meals. Often a certain sum towards expenses is allowed. A plan now in frequent use when several attend a meeting is for one of the group to furnish his own motorcar for the group and receive reimbursement wholly or partially in a lump sum. Each pays his own other expenses.

All travel at the expense of the College is contingent upon authorizations by the Board of Regents, and as the financial stringency became more and more evident, the Board saw here a possible place for economy, and January 9, 1931, called for an itemized estimate of out-of-State travel for the next year. In May the Board voted that except when on State or school business reimbursement should be limited to railway fare and Pullman, and that maximum expenditures for out-of-State travel should be limited as follows: University of Kansas, \$6,000; Kansas State College of Agriculture and Applied Science, \$6,000; Fort Hays Kansas State College, \$900; Kansas State Teachers College, Emporia, \$750; and Kansas State Teachers College, Pittsburg, \$1,300.

For the years 1932-33 and 1933-34, consistent with other reductions, the allowances for out-of-State travel were cut 25 per cent at each of the State schools, making \$4,500 the sum for this institution. For 1934-35 the amounts were reduced still more and made \$3,000 each for the University and this College, and \$400 for each of the others. Later the allowance for this College was made \$4,000. For 1935-36 and 1936-37 the allowance for each teachers' college was increased \$100 each year. For 1937-38 and 1938-39 the allowances were: University, \$4,500; Kansas State College, \$5,000; and each of the others, \$750.

BENEFIT TO THE COLLEGE

The College undoubtedly receives some great benefits from this fairly liberal policy in respect to out-of-State travel. The staff

members are benefited individually, they become acquainted with others who are working in similar lines, and the results of conferences are applied at home. Institutional prestige, and thus national recognition and service, are increased by worthy representation, which is not only a pleasure to realize, but is a positive asset in employing new personnel and in placing graduates. While it would be desirable in many ways to have the privilege of travel available to more persons, it is only by fairly regular attendance at annual meetings of an organization that the advantages accrue to any great extent.

SOIL SURVEY

The importance of a systematic survey of the soils of the State was recognized by the State Board of Agriculture, through its chemist, Prof. W. K. Kedzie, in 1874. Professor Kedzie collected and analyzed a number of soils.

The first detailed systematic survey made in the State was of Riley County in the summer of 1906. This was made by William T. Carter, Jr., and Howard C. Smith of the Bureau of Soils, United States Department of Agriculture. Surveys of other counties followed.

The Agricultural Experiment Station took up this work in a limited way in a study of typical soils from representative regions of the State which had been surveyed by the Bureau of Soils. This was by the chemistry department; Mr. C. O. Swanson was in direct charge, and the survey continued from 1908 to 1910.

The legislature of 1911 made an appropriation of \$5,000 for each of the fiscal years 1911-12 and 1912-13 for a soil survey. February, 1912, Mr. Ray Iams Throckmorton took the position of assistant in soils, and the field work of the soil survey. Shawnee County was surveyed in cooperation with the Bureau of Soils, represented by Mr. W. C. Byers. The chemical work was done by C. O. Swanson and C. E. Millar of the department of chemistry. The results were published as Bulletin No. 200 of the Agricultural Experiment Station.

This was a very fine progressive piece of work, but the legislature of 1913 repealed the law providing for a soil survey. The work was supported for a time by the use of other funds, and in 1915 reports were published on surveys of Cherokee and Reno counties, Bulletins 207 and 208, respectively, and in 1916 on Jewell County, Bulletin 211. Bulletins 200, 207, 208, and 211 were all issued under the joint authorship of Professors Call, Throckmorton, and Swanson.

As a result of sustained effort, the legislature of 1925 revived

the practice of making appropriations for the soil survey, and this was continued up to 1931, \$5,000 being allowed for each of the fiscal years ending June 30, 1926 to 1933. However, in the impounding of funds in 1932 the soil survey suffered, and the legislature of 1933 voted that \$7,000 of the 1931 appropriation be charged off. In the thirty-seventh biennial report, 1936-1938, President Farrell urged the appropriation of \$15,000 a year for the next biennium that this important work may be carried toward completion at the rate of six to nine counties a year, but the legislature of 1939 made no appropriation for this purpose.

EXTENDING THE AREA OF AGRICULTURAL EXPERIMENTATION

From the date of the earliest experimental agricultural work at the College, it has been recognized that results obtained at its location may fail greatly in applicability in other parts of the State. Manhattan is 57 miles from the north line and 105 miles from the east line of the State, and the region is thus well toward the northeastern part of the State, and other regions naturally differ greatly in respect to climate, especially rainfall.

The differences of regions are not only those of climate and altitude, but the geological formation of the region at Manhattan is representative of a rather limited part of the State. The flint hills of the Permian, with residual and alluvial deposits derived from them wholly or in part, and soil which settled from water impounded by glacial ice, are found here.

In the '90's the Agricultural Experiment Station began to meet the needs of other parts of the State by carrying experimentation to them. For example, high grade sugar beet seed was distributed to applicants in all parts of the State to be grown under specified conditions, and seeds of tested varieties of several other crops were sent out for trial. Experiments in growing crops under irrigation were carried on in the vicinity of Garden City and Oberlin.

The first extensive permanent provision for western Kansas was made in 1902, when experimental work began at the Fort Hays Branch Experiment Station at Hays, Ellis County. The cession of the military reservation to the State by the United States was made in 1900, and it was accepted by the State February 7, 1901. Even that location is 150 miles from the west line of the State, and that limitation has been met in part by the location of branch stations at Garden City, Finney County (1906), Tribune, Greeley County (1911), and Colby, Thomas County (1913-14). All branch stations are supported chiefly by State appropriations, but considerable work with crops is conducted in cooperation with

the United States Department of Agriculture, and that department bears much of the expense of such work.

FORESTRY

Forestry stations had been operated at Ogallah and Dodge City. These were turned over to the Experiment Station in 1909. The Ogallah station was abandoned in 1913. From 1909 to 1917 the Dodge City station served as a branch experiment station, but it was not adequately supported, and by 1915 had dropped to the status of a demonstration farm. The legislature of 1917 voted that the land used by this station should revert to the original donors.

EXPERIMENTS IN COOPERATION WITH FARMERS

In 1911 cooperative experiments with farmers were introduced for determination of fertility and tillage requirements, and crop adaptations advisable with respect to existing climatic conditions in various parts of the State. By 1916 such experiments were conducted in 85 counties and included tests of wheat, corn, and other grains in respect to varieties, date of seeding, and use of fertilizers. Projects in rotations of crops were also included and many miscellaneous tests. During the season of 1938, 809 distinct experimental tests were made in cooperation with farmers. These were distributed through 97 counties and were designed to be of benefit to the immediate localities, respectively. Such extension of the activities of the College contributes toward making the State the campus.

EXPERIMENT FARMS

The physical and chemical character of the soils in southeastern Kansas presents conditions such that the Experiment Station staff considered that direct, prolonged experiments with crops upon them are highly desirable, and in 1923 an appropriation of \$6,000 for each of the years of the next biennial period was obtained. These were continued to 1931. With these appropriations work was carried on in Allen, Bourbon, Cherokee, Neosho, and Wilson counties. With the retrenchment of 1933, \$2,200 was charged off, the appropriations for the next four years were reduced to \$3,000 each, and the work was limited to Allen and Cherokee counties. Appropriations of \$5,000 were made for each of the years 1937-38 and 1938-39. The fields now being operated are in Cherokee, Allen, and Neosho counties. These field trials have proved very valuable in the study of problems of soils and crops in this region, which differ widely in character from other parts of the State.

The value of the results obtained in the southeastern experimental fields led to requests for analogous service in other parts of

the State which present significant differences in soil, crop, and climatic conditions from those existing in regions already served. The legislature of 1931 made appropriations for two additional groups of outlying experiment fields, one in south central Kansas, the other in northeastern Kansas.

The south central experiment fields were located on three of the principal soil types of Sedgwick, Kingman, and Pratt counties. The work with soils and crops is designed to find the answers to problems of that region. The appropriations made in 1931 were \$6,000 for each of the next two years, but the retrenchment action of 1933 reduced the total to \$9,000, and only \$3,000 was allowed for each of the next four years. For each year of the biennium ending June 30, 1939, \$5,000 was allowed.

The fields located in northeastern Kansas are for the purpose of studying the problems of potato production, the management of young apple orchards, mature apple orchards, small fruit productions, and general crops and soils. For each of the fiscal years ending June 30, 1932 and 1933, \$10,000 was appropriated, but \$4,500 was charged off from the total by the legislature of 1933. For the six fiscal years, 1933-34 to 1938-39, the appropriations have been \$6,000 each.

To meet still further the special needs of certain regions, the legislature of 1935 appropriated \$3,000 for each of two years for experiment fields in southwest Kansas, and in 1937, \$5,000 was allowed for each of the years, 1937-38 and 1938-39. Fields have been located in Meade and Ford counties and investigation is getting well under way concerning soil management as affecting moisture conservation and crop production. Attention is being given to obtaining information concerning grasses which may be grown, and to the special problems of very sandy soils.

The established situations for the work of the Agricultural Experiment Station are now nine: the main station at Manhattan, the branch stations at Hays, Colby, Garden City, and Tribune, and the four localities with experimental fields in the northeastern, southeastern, south central, and southwestern parts of the State.

Unfortunately, the unprecedented weather conditions of the recent past, especially as to rainfall, have interfered severely with experiments with soils and crops at all these points. Testing differences of procedure is impossible when no kind of procedure leads to any crops. From 1932 to 1938, inclusive, the State in general has suffered from greatly reduced rainfall. At Manhattan the precipitation in inches for the years shown amounted to the following: 1930, 34.18; 1931, 38.64; 1932, 23.57; 1933, 21.94; 1934, 19.38; 1935, 37.71; 1936, 24.55; 1937, 21.81; and 1938, 29.17.

INSPECTION AND REGULATORY SERVICE

Many of the experiment stations, especially the older ones, have had important regulatory functions to perform. The Kansas station did not at first enter this area of activity.

FERTILIZERS AND FEEDING STUFFS

The legislature of 1907 on the initiative of Director Charles W. Burkett passed an act providing for the registration, inspection, and analysis of commercial fertilizers, and another providing for the registration, inspection, and analysis of concentrated feeding stuffs, including condimental feeds or foods. The administration of these laws was made part of the duty of the director of the Agricultural Experiment Station, and the chemist of the Station was responsible for the inspection and analyses.

The feeding stuffs law was an entirely new provision for public control of business in the State, and the fertilizer law replaced one which had received little attention and had been administered by the secretary of the State Board of Agriculture. Connecting the enforcement of these laws with the Agricultural Experiment Station gave assurance of scientific, non-political administration, and indications of needed research were sometimes found. The expense of this service was met by the payment of certain fees, and any surplus that might arise was available for use in agricultural research.

While there were certain advantages to the Experiment Station in its connection with these laws, the exercise of police power is unpleasant, and the Station officers became convinced that it would be better for the College to be free from such entanglements. This position was also taken by the Association of Land-grant Colleges and Universities. By mutual agreement a law was enacted by the legislature of 1923, transferring the responsibility for the administration of these laws to the State Board of Agriculture, and a new law relating to feeding stuffs was passed. In 1927 the fertilizer law was also revised.

DAIRY COMMISSIONER

The legislature of 1907 also enacted a law providing for a State dairy commissioner, who was to be appointed by the governor, on the nomination of the secretary of the State Board of Agriculture, the director of the Agricultural Experiment Station, and the professor of dairy husbandry at this College. An office for him was to be provided at the College, and his duties were educational and promotional, as well as regulatory and of a police character. Sam-

ples of dairy products taken were to be analyzed by the chemist of the Experiment Station. In 1909 the law was revised, and the Board of Regents was given the appointing power.

Pursuant to the policy of making the College free from police duties, the legislature in 1925 provided that the dairy commissioner should be appointed by the State Board of Agriculture, and be furnished an office in the statehouse at Topeka. In 1935 a bill providing for moving the office back to the College was introduced in the legislature, but was defeated.

LIVESTOCK REGISTRY

Another regulatory function performed by the College was through the State Livestock Registry Board, which consisted of the dean of the Division of Agriculture, the head of the veterinary department, and the head of the animal husbandry department. This Board passed upon the licensing of stallions, and certified to their pedigrees, soundness, and certain other characteristics. Satisfactory animals were registered, and such registration required annual renewal. The College was relieved of this responsibility by the legislature of 1925 through its transfer to the secretary of the State Board of Agriculture.

SEED TESTING AND INSPECTION

As early as 1905 the department of botany was serving the public in a special way by the examination of agricultural seeds with reference to their purity and germinating power. An extended account of the work with alfalfa seed was published as Bulletin No. 132, and the imperative need of a State seed control laboratory was urged. In 1912 the Board of Regents approved the draft of a bill looking toward attaining this end as proposed by Professor Roberts.

This work was continued as a voluntary public service, and the annual report of the director of the Agricultural Experiment Station for 1914-15 shows that Mrs. Elisabeth P. Harling was seed analyst that year. The next two years Mr. Robert Schmidt, also of the botany department, was seed analyst. The report for 1917-18 shows Mrs. Harling as seed analyst, in the department of agronomy, and since 1917 this important work has been carried on by that department.

Finally, in 1925, the legislature passed an act regulating the sale and distribution of agricultural seeds, and making an appropriation therefor. The secretary of the State Board of Agriculture is the executive officer designated to carry the responsibility for

inspection and testing of agricultural seeds. This law was replaced by a revision in 1935.

These several regulatory laws covering fields previously occupied by the College are now under the control of the secretary of the State Board of Agriculture. As the College has the laboratories and trained personnel for making any necessary scientific tests, the secretary provides the funds for meeting the expenses of such tests, and they are carried out at the College.

STATE DAIRY HERDS

One other public service of an advisory nature was designated by the legislature of 1917, and is still in effect. The law provides that the department of dairying of the College shall inspect, at least once in three months, the dairy herds held by State institutions, and shall consult and advise with those in charge in respect to improving the herds, handling the milk, feeding, and choosing feeds. The proper registration of animals, and the inspection and condemnation of diseased or undesirable individuals, are other matters to which the department is required to give attention. It is believed that this service continued thus through the years has been of considerable benefit to the State institutions concerned.

STATE ENTOMOLOGICAL COMMISSION

Public service is also rendered by the professor of entomology who is by law a member of the State Entomological Commission which is charged with the suppression of insect pests and plant diseases in the State. The Commission is an auxiliary of the State Board of Agriculture and under its supervision. The Commission is empowered to appoint a State apiarist, and since 1925 this position has been held by Dr. Ralph L. Parker, professor of apiculture and entomology in this College.

FOODS AND BEVERAGES

Under a law of 1905 the State Board of Health has authority to send inspection samples of foods and beverages to the department of chemistry of the College for analysis. This burden is shared with the University of Kansas. An enormous amount of work has been done during the past thirty years in this connection, and incident to the enforcement of the provisions of the State food and drugs act and regulations thereunder.

HIGHWAY WORK

The College has also performed service of a general public character in connection with the highway work of the State. In 1909 the highway engineer in the Extension Division gave much

State-wide service, and legislative recognition of him as "State engineer of roads and highways" was given him in 1911. He was required to furnish advice and scientific information to county engineers on roads and road-making materials, and on construction and care of roads, bridges, and culverts.

The legislature of 1917 created the State Highway Commission with a chief engineer, and provided that "the engineering and testing laboratories at the Kansas State Agricultural College at Manhattan shall be available for the use of the Commission and State highway engineer at all times." This relation continues to exist, and an enormous amount of experimental, testing, and analytical work has been done in these laboratories. This has been in examination of materials for the Commission, and also in fundamental research. Results of great value have been obtained.

SOME CHANGES IN PERSONNEL AND ACTIVITIES, 1925-1938*

Personnel changes in the College total more than fifty each year. Most of these are in the lower academic ranks. At this place



S. A. NOCK
Vice-president, 1936—.



R. W. BABCOCK
Dean, Division of General Science, 1930

only relatively few of those occurring since 1924 can receive comment, and such will be noted by Divisions of the College.

ADMINISTRATIVE OFFICES

Some changes were made in the administrative officers. Dean J. T. Willard, of the Division of General Science, was succeeded

*Changes since June 30, 1939, are not noted in this book.

July 1, 1930, by Dr. Rodney Whittemore Babcock. Doctor Willard had served as dean from June 18, 1909, and as vice-president from March 1, 1918. He continued as vice-president to January 1, 1936, when he was succeeded in that capacity by Dr. Samuel Albert Nock, and became college historian. The new dean and vice-president came from other institutions, with experience and ideas which have enabled them to add to the efficiency, service, and prestige of their respective offices.

In the office of the vice-president, Miss Myrtle E. Zener has been employed as secretary since April, 1918, and Mrs. Mary B. Swyers as stenographer since 1920. August 1, 1937, Miss Reba Clare Miller became assistant to the vice-president.

Another change in the Division of General Science within this period was the appointment of Charles Meclain Correll to be assistant dean of the Division, effective July 1, 1927. He still gives



L. E. CALL

Agronomy, 1907-1925. Dean, Division of Agriculture and Director of the Agricultural Experiment Station, 1925—.

one-half his time to the position of professor of history and government, and serves with distinction in both capacities. At the same date Miss Alice Melton's title was changed from secretary to assistant to the dean. She still (1939) retains this position, but on a half-time basis. She was first regularly employed as clerk to the director of the Agricultural Experiment Station in 1900.

The promotion of Dean Farrell to be president was followed by the appointment of Leland Everett Call, head of the department of agronomy, to be dean of the Division of Agriculture and director of the Agricultural Experiment Station. With his long previous experience in

the College, successful meeting of the greater responsibilities was not doubtful for a moment.

Dean Call was given leave of absence from January 1, 1934, to January 31, 1935, to be president of the Federal Land Bank at Wichita. During this period Dr. Waldo E. Grimes, professor of agricultural economics, was acting dean and director, and ably performed the duties thus falling to him.

In the Division of Agriculture Prof. Hugh Durham was appointed assistant to the dean effective September 1, 1915. His extended experience as a school executive had given him superior qualifications for this position, and his value was recognized in 1918 by making him also assistant to the director of the Agricultural Experiment Station. July 1, 1927, his academic title became assistant dean and associate professor of agricultural education. Professor Durham was a man of extraordinary industry, but in 1937 a paralytic stroke nearly took his life. On his return to work his duties were greatly reduced, and July 1, 1937, Mr. Clyde William Mullen became assistant to the dean and to the director, and associate professor of agronomy. Mr. Mullen had served, April 16, 1918, to September 8, 1918, as agricultural agent for Barton County, and as assistant professor of farm crops from September 8, 1918, to November 1, 1919. Professor Durham never fully recovered, and death took place October 15, 1938. He had set a very high standard of service.

To handle more adequately the responsible work with students in counsel or correction, Prof. M. A. Durland was made assistant dean of the Division of Engineering, September 1, 1926, a position for which his years as a student and teacher in the College well qualified him. He still gives part of his time to teaching as professor of machine design. It may also be mentioned here that a multitude of details are intrusted to Miss Louise Schwensen, who has been secretary to the dean since 1914.

This administration also provided for an assistant dean in the Division of Home Economics. Miss Margaret Ahlborn was appointed to this position July 1, 1929. She had had qualifying experience in the Division since 1923, and continued to serve as associate professor of food economics and nutrition, and was made professor in 1933. She resigned June 30, 1937, after her marriage. Her contribution to the successful administration of the work of the Division was so highly esteemed that the third house organized for practice in home management was named in her honor.

Miss Eva Myrtle McMillan, assistant professor of food economics and nutrition, and a member of the staff since 1930, was appointed assistant dean of this Division as a part of her duties, effective July 1, 1937.

Mrs. Jane Wilson Barnes was made secretary to the dean of the Division of Home Economics July 1, 1928, and July 1, 1938, became assistant to the dean. She had had much previous experience in the Division and in the Division of College Extension.

When the Division of Graduate Study was established November 1, 1931, Dr. James Edward Ackert was promoted from the

chairmanship of the graduate council to be dean of the Division. His fine work as chairman led to this appointment, and his service in the new capacity has been eminently able and productive.

The office of dean of women has continued to have Mrs. Mary Pierce Van Zile as its able administrator. Dean Van Zile is chairman of the faculty council on student affairs. This committee in much of its work cooperates with the student council, and much of the credit for the smoothness of the running of the local activities of students is due to the poise, good sense, understanding, and character of the dean. She also has responsibility for the operation of Van Zile Hall, the residence hall for women students, in which the same qualities find expression.

The dean of women has many other important duties which cannot be recounted here. Since the office was separated from that of the dean of the Division of Home Economics in 1918, it has grown greatly in scope of its activity, and the services of a competent assistant have been essential. Within that period the dean has been fortunate in having in that capacity Miss Grace Gilkerson, 1918 to 1921; Miss Mary Whittier, 1921 to December 31, 1923; Miss Beatrice Gates, January 1, 1924, to 1925; Miss Lucile Brickner, 1925 to 1928; Miss Louise Child, 1928 to 1931; and Miss Kathleen Knittle, since 1931.

For the social director of Van Zile Hall, the College has been especially fortunate in the selection of Mrs. Nina M. Rhoades, who has filled that position since the opening of the hall in 1926.

The office of the registrar is now affiliated with that of the vice-president, in accordance with a detail of the twenty-year program. Miss Jessie McDowell Machir, registrar since 1913, has had Miss Mary Kimball as her first assistant since 1918, and Miss Effie LoVisa Hastings as second assistant since 1928.

Miss Hattie H. White, secretary and treasurer, has been at the head of the business office since January, 1916. She began at the bottom in 1912, and has been retained and promoted on the basis of ability and excellence of performance. Fine service has been rendered in this office for many years by Birdye May Gear, Berenice Lewis (1927),* and Josie Long Whitney (1931). In the death of Miss Fannie Dale (1914), January 1, 1932, and Miss Emma Deere (1925), June 8, 1936, the office lost two efficient workers who had served many years. Mrs. Opal Hill succeeded Miss Deere, August 1, 1936.

In the College post office Miss Nellie May (1911) is still at the head. Miss Jessie Wagner (1920) and Miss Addie Adams (1921)

*A date enclosed in parentheses following a name shows when formal service in the institution began.

have assisted her, and with the help of students they handle an enormous amount of mail in the course of a year.

Dr. A. A. Holtz has continued through this administration to be the efficient general secretary of the College Young Men's Christian Association, and in addition to this to serve as adviser to men students. Throughout his connection, beginning in 1919, he has given work in religious education, and July 1, 1929, he became assistant professor of sociology. He was advanced to be associate professor of sociology July 1, 1935.

The Young Women's Christian Association in 1925 had for its secretary, Miss Lois Wildy, who came September 1, 1923. Miss Ethlyn Christensen was the secretary from September 1, 1926, to 1928, and Miss Ruth Fertig from September 1, 1928, to June 15, 1930. Miss Fertig was succeeded September 1, 1930, by Miss Dorothy Jean MacLeod, and she by Miss Ruth Haines, September 1, 1934. Miss Haines resigned June 30, 1939. The Association and the College have been fortunate in respect to the type, character, and general qualifications of these young women.

STUDENT HEALTH DEPARTMENT

The second head of the department of student health, Dr. Charles M. Siever, succeeded Dr. R. T. Nichols, December, 1916. Doctor Nichols served from February 11, 1914, to August 31, 1916. Doctor Siever served to August 31, 1935. During this period of nearly twenty years Doctor Siever built up a comprehensive system of office and hospital service to students. An increase in the sick-benefit fee from 50 cents a term to \$3.00 a semester made it possible to provide special apparatus and to employ several other physicians on full or part time. The patients of physicians are likely to be very pronounced in respect to likes and dislikes, confidence and distrust, and no physician can please everybody. An enlarged staff with opportunity for choice promotes satisfaction with medical service.

Dr. Myron W. Husband became College physician and head of the department of student health September 1, 1935, and at once established himself in the confidence of his clientele.

Space cannot be spared to touch on all the changes in personnel in this department, but it is a pleasure to note that there has been no change in the head nurse of the office since Miss Grace E. Umberger came September 1, 1919. Miss Umberger's fine personality and professional dexterity are remembered by thousands.

COLLEGE PHOTOGRAPHER

After effective service from October 7, 1919, Prof. F. E. Colburn resigned his position as head of the department of illustra-

tions, June 30, 1929. Mr. Floyd J. Hanna had been assistant in the department since 1922, and was made head July 1, 1930, after a year of service as acting head. This department has grown constantly in its importance in the activities of the College. Most of the recent fine photographs of College buildings used in the production of cuts for this book were made by Mr. Hanna, and his patience and skill in other services are here gratefully acknowledged.

DIVISION OF AGRICULTURE

During the time when Dean Call was on leave of absence, January 1, 1934, to January 31, 1935, Prof. Waldo E. Grimes, head of the department of agricultural economics, served as dean of the Division of Agriculture and director of the Experiment Station, and Dr. Harold Howe was acting head of the department of agricultural economics.

The department of agricultural economics has undergone great development. On the death of Dr. J. E. Kammeyer, January 11, 1936, head of the department of economics and sociology in the Division of General Science, that department was placed in charge of Doctor Grimes, and agricultural economics became a section of the department of economics and sociology. In this section are handled the courses having a direct bearing on agriculture, while the more general courses are retained in the department organized in the Division of General Science. The courses in accounting remain in the general department.

From 1925 to 1936 the staff occupied with agricultural economics expanded from six to nine in number, and in 1939 included eleven members. Between 1925 and 1939 the staff of the general section increased from four to seven, the entire department staff numbering eighteen. Twenty years before only four men were so employed.

The length of the current administration has provided ample time for employment, promotion, and resignation of many faculty members, but time and space do not permit narrating these interesting and important events. Many of the men and women are of high excellence, and a volume would be needed to do justice to them, in respect to ability and achievement. The department of economics and sociology stands high in all respects, thus reflecting the ability and driving power of Doctor Grimes. In the field of agricultural economics, with no disparagement of others, Messrs. Eric Englund (1921), Roy M. Green (1920), and Harold Howe (1925) may be mentioned as attaining the rank of professor. Others of professorial rank are mentioned with the department of economics and sociology.

The high standing of this department is proclaimed by the numerous calls made by the Government for the counsel of Doctor Grimes and others, and by the fact that superior fields of action have drawn away Professor Englund, Professor Green, and others.

Upon the promotion of Professor Call to the deanship of the division, Prof. Ray I. Throckmorton was advanced to the headship of the department of agronomy. The department has suffered from the successful competition of other fields of work in the resignation of Prof. S. C. Salmon, Dr. M. C. Sewell, Dr. John H. Parker, and others. Death also struck a heavy and sudden blow May 4, 1938, in the taking of Dr. A. E. Aldous, professor of pasture management, at the age of 51 years. Mrs. Elisabeth P. Harling, seed analyst from 1917, died after a prolonged illness, November 30, 1938. These several losses have been met by promotions and new appointments that maintain the high standing of this important department.

In addition to those mentioned, the department staff includes Professor H. H. Laude (1920), Associate Professors J. W. Zahnley (1915), A. L. Clapp (1914), W. H. Metzger (1932), and H. E. Meyers (1929), and Assistant Professors C. D. Davis (1921) and J. C. Hide (1935), of professorial rank.

The department of animal husbandry, under the able leadership of Dr. C. W. McCampbell, has had the good fortune to retain most of its higher-ranking staff members, and its high standards of accomplishment have been fully maintained. Of professorial rank the staff now also includes Professors A. D. Weber (1923), H. L. Ibsen (1919), F. W. Bell (1918), and C. E. Aubel (1919); Associate Professors R. F. Cox (1930) and D. L. Mackintosh (1921); and Assistant Professor R. B. Cathcart (1935).

Prof. James B. Fitch, on the staff of the department of dairy husbandry from 1910, and the head from 1918, yielded, December 31, 1934, to the attractions of the University of Minnesota, greatly to the regret of the friends of the department. His service had been marked by most pronounced success. He was succeeded April 1, 1935, by Floyd W. Atkeson. Professor Atkeson had had experience in the department some years previously, and was a worthy successor to Professor Fitch. Others on the staff are Professors H. W. Cave (1918) and W. H. Martin (1925); and Assistant Professor W. J. Caulfield (1927). Associate Professor W. H. Riddell, who had been a member of the staff most of the time since 1924, resigned, effective May 15, 1939, to become head of the department of dairy husbandry in the University of Arizona. This promotion indicates the loss sustained by the College.

Within this period the department of horticulture has exhibited

considerable change in personnel. Prof. Albert Dickens, who had been on the staff since 1899, and head of the department from 1902, died November 28, 1930, after a long, heroic struggle with tuberculosis. His long connection with the College, his wholesome cheery disposition, and his professional attainments and sound sense had given him a place in the State that has not been filled. Prof. R. J. Barnett had been the next in rank since 1920, and his promotion to the headship of the department was natural and commendable, and justified by his performance of its duties. July 1, 1938, the executive duties were transferred to Dr. Wm. F. Pickett, who had been on the staff for twenty years, and the time of Professor Barnett was thus left freer for research and writing.

The staff of this department also includes of professorial rank: Professor L. R. Quinlan (1927); Associate Professors S. W. Decker (1937), Geo. A. Filinger (1931), and L. F. Smith (1935); and Assistant Professor Erwin Abmeyer (1934).

Through most of the history of the College the care and development of the campus has been an important responsibility assigned to the department of horticulture. Although in general control of the head of the department, in more recent years a specially trained man has been employed to be in immediate charge of this important field of landscape design and development. At the beginning of this period Arthur H. Helder was in charge and remained to January 31, 1927. His successor, Leon Reed Quinlan, came September 1, 1927, and has continued to render his excellent service.

The department of milling industry, with Dr. Chas. O. Swanson (1906) as its head since 1923, has progressed markedly, the staff now numbering five instead of three, and the number of students increasing to such an extent that, because of lack of laboratory space, it has been necessary to restrict to 65 the enrollment for the four-year curriculum in milling industry. This became effective September 1, 1938.

The staff increase has been in part especially for the provision of expert technical and chemical service. To this end, September 1, 1935, Rowland J. Clark was employed, but commercial advantages led him to resign March 31, 1938, and May 15, 1938, he was succeeded by Professor R. K. Larmour. The staff also includes Associate Professor E. B. Working (1923) and Assistant Professor R. O. Pence (1927).

The department of poultry husbandry, with Professor Loyal F. Payne (1921) continuing as its head, maintains its fine standing, and in research work has contributed data of significant commercial importance, as well as scientific interest. Much of this is

due to Professor Don C. Warren (1923) and Associate Professor H. M. Scott (1928).

DIVISION OF ENGINEERING AND ARCHITECTURE

The name of the Division of Engineering was changed so as to express its scope better, and effective July 1, 1938, was made Engineering and Architecture. The department of architecture has always been a component of that Division. The departments of the Division have remained unchanged through this period.

Professor Frederick C. Fenton, July 1, 1928, succeeded Professor H. B. Walker (1910) as head of the department of agricultural engineering. Several other changes in personnel have taken place, including the resignation of Associate Professor W. H. Sanders, August 31, 1930, who had been on the staff since 1912, and the election of E. L. Barger in 1930, who now has the rank of associate professor.

Prof. Charles H. Scholer remains at the head of the department of applied mechanics. His notable research work led to his being selected by the Portland Cement Association to organize a research program relating to the durability and causes of failure in concrete. To perform this service he received leave of absence from February 1, 1939, to June 30, 1940.

Messrs. Jules H. Robert (1916) and Earle R. Dawley (1920) have been advanced to professorships, and Assistant Professors Lester H. Koenitzer (1929), Gerald Pickett (1929), and George R. McCaulley (1937) added to the staff. After excellent service since 1923, Associate Professor Frank J. Cheek, Jr., resigned his position January 31, 1937. He gave only half his time to this department.

A note of sadness was struck in the department of architecture by the death of Professor *emeritus* John Daniel Walters. He had done no active work in the department for several years, but his earlier connection had been so vital that his final going could not but give pause, and an occasion for thought and philosophizing. He had been blind for several years, and was cared for in the home of his daughter, Mrs. Ida Umbehr, Alma, Kansas, where his death took place September 30, 1929.

Professor Paul Weigel (1921) remains at the head of this department to which much strength is added by Associate Professors John F. Helm, Jr. (1924) and Henry E. Wichers (1924), who have been advanced from instructorships. In 1929 Mr. Joseph T. Ware was added to the staff as an instructor and in 1935 was promoted to be an assistant professor. Associate Professor Charles L. Morgan (1934) resigned May 31, 1937, and Associate Professor F. J. Cheek, Jr., January 31, 1937.

The personnel of the department of civil engineering has remained almost unchanged throughout this period. Professors F. F. Frazier (1911) and M. W. Furr (1917), Associate Professor L. V. White (1918), and Assistant Professors W. W. Crawford (1923) and R. F. Morse (1929) complete the professorial staff, of which Professor L. E. Conrad is the head.

The sudden untimely death of Professor Clarence E. Reid (1914), head of the department of electrical engineering, February 28, 1927, was met by the promotion of Professor Royce G. Kloeffler to succeed him. Professor Kloeffler had been on the staff since 1916, and his thorough competence was thus recognized. The continuous increase in the enrollment in electrical engineering has made an increase in the staff necessary. Professors Jesse L. Brenneman (1920) and Russell M. Kerchner (1922), Associate Professors Orville D. Hunt (1923) and L. M. Jorgenson (1925), and Assistant Professors E. L. Sitz (1927) and Harner Selvidge (1938) are of professorial rank.

Television has for some years been an important line of research in the department of electrical engineering. In 1932 the Federal Radio Commission granted the College a construction permit for a broadcasting station to operate at 125 watts power, on a frequency of 2100-2200 kilocycles, with the call letters W9XAK. A transmitter and receiver were designed and built and a vertical antenna constructed which greatly improved the broadcasting. By the spring of 1934 the station was broadcasting three times a week and had developed into one of the best stations in the country in respect to quality of the picture broadcast. The introduction of electrical scanning has rendered this earlier work of little current value, but research is being continued.

Professor Clinton E. Pearce continues to head the department of machine design, and Messrs. Merrill A. Durland (1919) and Floyd A. Smutz (1918) have been promoted to be professors. Associate Professor R. F. Gingrich (1923) has also been assistant superintendent of maintenance since 1933. Of professorial rank the department also now (1939) has on the staff Assistant Professor George F. Branigan (1927).

The department of mechanical engineering suffered a severe loss in the death of its head, Professor James P. Calderwood (1918), August 9, 1934, after a prolonged illness. This loss was met January 1, 1935, by the appointment of Professor Linn Helander, a man of fine professional training and valuable practical experience. Professors Albert J. Mack (1917) and Boyd B. Brainard (1923), and Assistant Professors Arthur O. Flinner (1929) and Wilson Tripp (1936) are on the staff of this department.

The College buildings, roads, walks, tunnels, water plant and water-distributing system, the heat and power plant, and the distribution of steam, gas, and electricity, construction of minor buildings and other features of the physical plant, custodianship and care of buildings, and maintenance and repair of them, and almost anything else of a practical engineering character not handled by a special department is in the general care of the Division of Engineering, and is in direct charge of the superintendent of maintenance.

Since 1925 this important position has been held by Mr. George R. Pauling. Probably no other group of services connected with the College so exposes the responsible officer to criticism. Its work touches every employee and student in one or more ways, and its nature is such that anyone may understand it more or less and feel free to express his opinion. Usually expressions are made only when something is deemed to be wrong. The work of Mr. Pauling and his associates has been such that serious criticism has seldom been heard, and most of this has been based on misinformation, or lack of information. Excellent systematization and organization, and the effective cooperation of associates, has made the service of Mr. Pauling something in which he can take satisfaction. It has been so good that most of us know nothing about it.

Jacob Lund, employed as fireman and steamfitter in 1894, and engineer in 1898, was made superintendent of the heat and power department in 1901 when this activity was separated from the department of mechanical engineering. His reports at that period show his comprehension of the needs of the College in respect to equipment for heat and power production. In 1902 he introduced instruction in the care and operation of traction engines. August 1, 1917, his duties were increased to include care of the buildings, a head janitor being under his direction. Thomas B. Robbins was appointed head janitor August 15, 1917, succeeding George F. Wagner (1914), who resigned August 1, 1917. Mr. Robbins resigned January 8, 1918, and was succeeded, January 9, by Stephen A. Geauque. Part of the burden on Superintendent Lund was removed by the appointment of George R. Pauling to be engineer of the power plant, effective December 1, 1913, and in 1916 Mr. Pauling took over the superintendence of buildings and repairs.

July 1, 1925, Mr. Lund was given an *emeritus* status as superintendent of heat and power and custodian of buildings and grounds, and retained this position until his death, January 21, 1937, at 80 years of age. Mr. Lund was beloved for his imperturbable good temper and kindness of heart, and esteemed for his industry, intelligence, engineering ability, and loyalty. Coming to this country

about 1870 with no knowledge of English, he was graduated by the Kansas State Agricultural College in 1883, and awarded the degree master of science in 1886. He was a splendid example of American possibilities for men of frugality, energy, industry, probity, and intelligence.

Mr. S. A. Geauque, head janitor, later custodian, served with great acceptability to July 1, 1937, when at an advanced age he was placed on a part-time basis as assistant custodian. Effective July 1, 1937, Mr. Robert B. Bock became custodian. Associate Professor R. F. Gingrich (1923) is assistant superintendent of maintenance, and Lester H. Drayer (1916) has been chief engineer since 1927.

The department of shop practice continues to enjoy the superintendency of Professor Walter W. Carlson, who was added to the staff in 1910, and made superintendent in 1912. Of professorial rank the department staff now includes Professor Gabe A. Sellers (1919), Associate Professor Mannie R. Wilson (1936), and Assistant Professors Edward C. Jones (1916), Daniel E. Lynch (1914), Harry W. Aiman (1918), and Milo J. Stutzman (1934), most of whom have been employed for many years. In the death of Eugene C. Graham (1922), March 20, 1936, the department lost a valuable associate professor of farm shop practice.

DIVISION OF GENERAL SCIENCE

The size of the number of those connected with the Division of General Science precludes the possibility of making reference to more than a small fraction. Data concerning rank and personnel are usually derived from the budget for 1938-39.

Dr. L. D. Bushnell (1908) has continued his able administration of the department of bacteriology. Professor Percy L. Gainey (1914) is still rendering service of the quality which won for him in 1929, one third of the "Chilean Nitrate of Soda Nitrogen Research Award" for "Researches on Nitrogen Fixation by *Azotobacter*." This award is made to stimulate and reward research in the general field of soil nitrogen.

Professor Arthur C. Fay (1921) was drawn away by the superior financial attraction of a commercial connection, June 30, 1937. Assistant Professors Vernon D. Foltz (1927) and Frank E. Nelson (1937) are now in the department with others of lower rank.

Professor Leo E. Melchers (1913) has been head of the department of botany and plant pathology since 1919. From September 6, 1927, to June 30, 1929, he was on leave of absence to study the problems of plant diseases in Egypt for its government. Other full

professors in this department are Mr. W. E. Davis (1909), Dr. E. C. Miller (1910), Dr. H. H. Haymaker (1917), and Dr. F. C. Gates (1919). Associate Professor O. H. Elmer (1927), Assistant Professor Margaret A. Newcomb (1925), and six others completed the staff in 1939. While Professor Melchers was absent on leave, Doctor Miller headed the department with eminent ability.

The age and service of Professor Davis were recognized in 1938, by placing him upon a half-time basis. Doctor Miller within this period created a monumental textbook on "Plant Physiology," which is recognized all over the world as standard, and reached the second edition in December, 1938. Doctor Gates has prepared three monographs on Kansas plants, "Trees," "Grasses," and "Flowering Plants," which were published by the State Board of Agriculture and are of a very high order of merit. While on sabbatic leave of absence, Associate Professor Nora E. Dalbey died May 23, 1932, in Berkeley, California. She had been an able member of the staff since 1918.

The department of chemistry since the burning of Denison Hall, August 3, 1934, has been operating under a heavy handicap, but the increase in College enrollment has required a considerable increase in personnel even since that date. In 1924-25 the staff included three professors, two associate professors, four assistant professors, one associate, twelve instructors, three assistants, and two graduate assistants, a total of 27. In 1938-39 the total of 38 was made up by seven professors, two associate professors, ten assistant professors, eleven instructors, three assistants, and five graduate assistants.

Those on the chemistry staff who rank as professors are Doctors H. H. King (1906), J. S. Hughes (1910), H. W. Brubaker (1913), C. W. Colver (1919), W. L. Faith (1933), E. B. Keith (1918), and A. T. Perkins (1925). The associate professors are Doctors W. A. Van Winkle (1922) and H. N. Barham (1929). The assistant professors are Miss Stella M. Harriss (1917) and Doctors J. L. Hall (1922), M. E. Lash (1922), H. W. Marlow (1925), B. L. Smits (1926), A. C. Andrews (1926), C. H. Whitnah (1929), J. H. Shenk (1929), R. M. Conrad (1936), and J. W. Greene (1937).

Within this period there have been many separations from the department, most of which were from among the younger group, who found promotions or financial advantages elsewhere. Professor W. L. Latshaw, who had been in charge of the quantitative research laboratories since 1914, and had served with distinguished executive and professional ability, resigned July 15, 1933, to accept a responsible position with a Utah mining company. Professor E.

L. Tague (1914), who had been engaged especially with research in proteins, died suddenly January 11, 1934.

The College suffered a distinct loss in the death, January 11, 1936, of Professor J. E. Kammeyer, head of the department of economics and sociology, who had served the College since 1903. At the beginning of this administration in 1925, this department had a staff of four, Professors J. E. Kammeyer and Walter H. Burr, Assistant Professor T. J. Anderson, and Instructor Leo Spurrier. Professor Burr resigned August 31, 1929, and Professor Anderson, May 31, 1931. In 1936 the staff included Professor Kammeyer, Professor Randall C. Hill (1929), Associate Professors H. M. Stewart (1926) and A. A. Holtz (1919), and Assistant Professors C. R. Thompson (1929), C. L. Nelson (1935), and W. A. Murphy (1933). Professor Murphy was on leave of absence much of the time to assist in State and Federal work, and resigned May 31, 1938.

After the death of Doctor Kammeyer, the department of economics and sociology and the department of agricultural economics were merged, the latter becoming a section of the former, with Dr. Waldo E. Grimes as head of the newly constituted department. This department included, 1938-39, Professors W. E. Grimes (1913), Harold Howe (1925), and R. C. Hill (1929); Associate Professors H. M. Stewart (1926), A. A. Holtz (1919), J. A. Hodges (1923), C. R. Thompson (1929), and Geo. Montgomery (1925); Assistant Professors W. H. Pine (1934), C. L. Nelson (1935), F. L. Parsons (1935), and R. J. Eggert (1938), and seven with the rank of instructor. Assistant Professor H. J. Henney (1921) had resigned May 7, 1938, to accept an important Federal position.

The personnel of the department of education has more than doubled since 1925. Much of the work of the department is with senior and graduate students, and the rank of its staff members must be high. In 1938-39 there were seven professors: Doctors E. L. Holton (1910), J. C. Peterson (1917), C. V. Williams (1920), V. L. Strickland (1917), and O. W. Alm (1929), and Professors A. P. Davidson (1919) and Lucile O. Rust (1924). Dr. Roy C. Langford (1925) had the rank of associate professor, and Laura F. Baxter (1927), L. F. Hall (1926), and M. C. Moggie (1933) that of assistant professor. There were seven others of lower rank on the staff, a total of 18.

The staff of the department of English has undergone little change in personnel during this period. Associate Professor Margaret Russel (1917) died March 20, 1926, and Instructor Katherine M. Bower (1918), February 20, 1934. For 1938-39 the staff included Professors H. W. Davis (1913), R. W. Conover

(1915), N. W. Rockey (1921), C. W. Matthews (1920), Ada Rice (1899), and J. O. Faulkner (1922); Associate Professors Anna M. Sturmer (1920), Helen E. Elcock (1920), A. W. Breeden (1926), and J. P. Callahan (1924); Assistant Professors Annabel A. Garvey (1920), Harriet S. Parker (1924), and Nellie Aberle (1921); and three instructors.

The department of entomology has grown appreciably during this period, but suffered a great loss November 11, 1929, in the death of Professor James W. McColloch, who had been on the staff since 1910. He was especially able in research, and in the absence of Professor Dean had served as head of the department, 1923-24. The department also lost an able man in Dr. J. H. Merrill, state apiarist, who was finally compelled to yield to the effects of disease, and resigned in 1925 after 13 years of service. For 1938-39 the staff included Professors Geo. A. Dean (1902), Roger C. Smith (1920), and R. L. Parker (1925); Associate Professor R. H. Painter (1926); and Assistant Professors H. R. Bryson (1924) and D. A. Wilbur (1928) of professorial rank.

Geology is still an appendage of zoology in the College organization. The work is ably headed by Arthur B. Sperry (1921) who has been promoted to the rank of professor.

The name of the department of history and civics was changed in 1927 to history and government, as being more in accord with current usage. Some important changes in personnel have taken place. A very able member of the staff, Associate Professor Arthur F. Peine (1916), for business reasons, was given leave of absence for the year 1925-26, and resigned May 31, 1926, to the great loss of the department. He was succeeded September 1, 1926, by Dr. Fred A. Shannon, whose industry and professional strength were recognized in 1928 by the award of the Justin Winsor biennial prize for historical research dealing with some phase of American history. Doctor Shannon's monograph dealt with "The Organization and Administration of the Union Army, 1861-'65." In 1929 Doctor Shannon also received, in recognition of this work, the Joseph Pulitzer prize "for the best book of the year upon the history of the United States."

All members of the departmental staff for 1938-39 were of professorial rank, including Professors R. R. Price (1903), I. V. Iles (1911), E. V. James (1912), C. M. Correll (1922), F. A. Shannon (1926), F. L. Parrish (1927); Associate Professor Dwight Williams (1926); and Assistant Professor Inez Alsop (1923). However, Professor Shannon was given leave of absence for the year, and Dr. A. B. Sageser employed in his place. Later Doctor Shannon resigned effective May 31, 1939. Professor Cor-

rell continued to serve as assistant dean of the Division of General Science.

In the department of industrial journalism and printing, Professor Nelson A. Crawford (1910) was on leave of absence for the year 1925-26, and resigned June 30, 1926. Professor Chas. E. Rogers was made head of the department and has served most acceptably since. He was on sabbatic leave of absence for study 1931-32, and on leave again August 1, 1934, to August 31, 1935. During these periods Professor E. T. Keith was acting head of the department and gave able service. In this composite department Professor Rogers heads the work in journalism and Professor Keith that in printing.

In 1933 the members of the staff of this department revived the *Kansas Magazine*, and have continued its publication as an annual holiday offering. It devotes special attention to the literature and art of those who are or have been identified with the State of Kansas.

Changes in the staff have been rather frequent because of resignations to accept better positions. The budget for the year 1938-39 included Professors C. E. Rogers (1919) and E. T. Keith (1912); Associate Professors John A. Bird (1936), E. M. Amos (1920), and Helen P. Hostetter (1932); and Assistant Professor Ralph R. Lashbrook (1934). However, Associate Professor Bird resigned June 30, 1938, and Mr. Lashbrook was promoted to his rank and position, and Mr. Hillier Krieghbaum employed as an assistant professor, effective July 1, 1938.

The growth of the library and its installation in the new Library building have been accompanied by marked increase in the number of regular employees and student helpers. Though but few of the staff participate in the instruction in library methods given as a course for students, most of the service in the library is educational in character, and its satisfactory performance is dependent to a large degree on the amplitude of the general education of the personnel. The employment of academic titles indicating rank is thus not inappropriate.

The staff for 1938-39 consisted of Professor A. B. Smith (1911), librarian; Associate Professor Grace E. Derby (1911), associate librarian; Assistant Professor Elizabeth H. Davis (1914), reference librarian; Assistant Professor Mildred Camp (1927), head of circulation department; Assistant Professor Mary E. Hoff (1928), head of documents department; Instructor Gladys V. Baker (1935), head cataloguer, from September 1, 1938; Instructor Lillian J. Swenson (1927), assistant reference librarian; Instructor Martha Cullipher (1928), assistant loan librarian; Instruc-

tor Anna Neal Muller (1929), assistant cataloguer; Instructor Mary Eileen Roberts (1938), document cataloguer; Assistant Mabel Baxter (1916), in charge of continuations; and Assistant Rose G. Diller (1938), class reserves assistant.

Mrs. Jessie Gulick (1907), who had been acting head cataloguer since 1923, resigned, effective August 31, 1938. Miss Swenson was on sabbatic leave, 1938-39, and Marie J. Stover was em-



MATHEMATICS HALL

This view shows the present (1940) state of the chemistry building erected in 1876, and illustrated and described on pages 44 and 74. The exterior of the building is nearly the same as it has been since 1901, but the interior was completely transformed in 1939 to fit it for use by the department of mathematics, which occupies the entire building.

ployed temporarily as an instructor in her place. Miss Cullipher was also on sabbatic leave, 1938-39, and Carol L. Owsley was employed as a temporary instructor on that account.

Professor B. L. Remick, who had successfully headed the department of mathematics since 1900, was placed on a half-time basis September 1, 1937, and the responsibility of the headship transferred to Dr. Wm. T. Stratton at that time. No separations of those of professorial rank have taken place since 1925, but promotions and additions have developed the personnel in that category to the following for 1938-39: Professors B. L. Remick (1900), W. T. Stratton (1910), and A. E. White (1909); Associate Professors Emma Hyde (1920), C. F. Lewis (1920), and W. H. Lyons (1924); and Assistant Professors W. C. Janes (1922), on sabbatic leave, Thirza Mossman (1922), Ina E. Holroyd (1900), R. D. Daugherty (1930), G. C. Munro (1937), and D. T. Sigley (1938).

As the officers in the department of military science and tactics are detailed by the War Department of the United States for limited periods of service, a considerable turnover in personnel naturally takes place. Lieutenant Colonel Fred W. Bugbee took over the department August 13, 1924. He was an able and exacting officer and served the College faithfully until his transfer June 23, 1926. He was succeeded by Lieutenant Colonel J. M. Petty, who remained until June 25, 1931, and attained the rank of colonel within that period. The extension of the usual four-year tour to five years is definite evidence of the esteem in which the work of Colonel Petty was held by the College and the War Department.

Colonel Petty was succeeded by Lieutenant Colonel John S. Sullivan, June 25, 1931, an able and popular officer who attained the colonelcy while in service here, and made a new record by holding his detail to this position until June, 1937. He was succeeded by Colonel Ralph W. Kingman, September 1, 1937, who still (1939) retains this detail.

Many other officers have been detailed for service here since 1925, but these cannot be named individually. As a rule, the College has been very fortunate in respect to the officers sent here by the War Department. With hardly an exception they have conducted themselves as soldiers and gentlemen, and cooperated with the College at all times. For the College year 1938-39 the staff included Colonel Ralph W. Kingman (1937); Majors Leonard R. Crews (1934), H. C. Dempewolf (1935), James W. Campbell (1937), Everett E. Brown (1938), Thomas R. Holmes (1938); and Captains Karl C. Frank (1935) and Harry S. Aldrich (1937). First Lieut. Inf. Res. M. J. Peters (1935) was property custodian.

In connection with the department of modern languages, record must be made of the resignation of Dr. John V. Cortelyou, May 31, 1934. He had been head of the department since 1904. His leaving was not only a departmental loss, but it also affected athletics, the Stadium Corporation, and especially the editing of the College catalogue. By reason of his ideals and care the catalogue was given very great accuracy as to details in its information concerning the faculty, curricula, courses, and facilities. Doctor Cortelyou came to head a new department, that of German, and during his incumbency its scope was extended to include French and Spanish also.

The College was fortunate in obtaining Dr. Fritz Moore to succeed Doctor Cortelyou, September 1, 1934. Other members of the staff are Professor L. H. Limper (1914), Associate Professors Cornelia W. Crittenden (1926) and Dorothy B. Pettis (1927), and Instructor Sue Townsend (1934). In the absence of Miss

Pettis on leave, 1938-39, Mr. R. E. Pyle (1938) is serving as instructor.

Just before the beginning of the administration of President Farrell the resignation of Professor Ira Pratt (1921) was announced. Professor Pratt's work as head of the department of music had been of high quality, and the loss of his vocal talent and his hearty, wholesome individuality was a significant one. Associate Professor Harold P. Wheeler (1919), the next in rank, was promoted to be head of the department and professor of music. Professor Wheeler was an artist of much musical genius, and especially able as a conductor of orchestra. He administered the department well, and notably developed the curricula offered. An important item of his service was securing the return of William Lindquist to be associate professor of voice. Professor Lindquist was well known here for his beautiful baritone voice, having been on the staff from 1921 to 1923. Professor Wheeler resigned May 31, 1927, and Professor Lindquist was appointed as his successor, June 1, 1927. Under the guidance of Professor Lindquist the department has continued its growth. Public evidence of this is presented in College assembly programs, Sunday afternoon recitals, and numerous other connections.

For 1938-39 the music faculty of professorial rank included Professor William Lindquist; Associate Professors Edwin D. Sayre (1925) and Lyle W. Downey (1928); and Assistant Professors Ruth Hartman (1924), Clarice M. Painter (1924), Alice C. Jefferson (1925), Max R. Martin (1929), Charles W. Stratton (1927), Marion H. Pelton (1928), Richard R. Jesson (1929), and Hilda R. Grossmann (1927).

With the exception of its head, Professor M. F. Ahearn, the department of physical education and athletics has undergone a complete change in personnel since 1925. The number has increased from eight to fourteen, and in addition part-time coaches are employed at certain seasons. It is not practicable at this point to follow through all the changes. Most of these have been due to voluntary resignations, regretted by the management, at least temporarily. Several of the staff are coaches of athletic teams which participate in intercollegiate contests, and thus come prominently before the public. If winning teams are not produced, such men are liable to receive severe, and often unjust, criticism. Again, one may obtain too much public credit because of having the good luck to follow another one who has laid a good foundation. As public opinion is seldom unanimous in judgments in this field, this writer will not demonstrate the futility of discussing individuals to any extent.

The department is naturally divided into two sections—one for men, the other for women. The gymnasium work required for men was in charge of Assistant Professor E. A. Knoth (1920) until January 31, 1926, when he was succeeded by Assistant Prof. Louis P. Washburn, who is still performing successfully the rather exacting duties of the position, and now has the rank of professor. Wesley L. Fry (1934) is another professor in this section, and the head coach for football. Stanley L. Williamson (1935) is an associate professor, and coaches football. The assistant professors are Frank P. Root (1924), basketball coach, Ward H. Haylett (1928), coach for track sports, and C. S. Moll (1929), who shares with Professor Washburn instruction in swimming and in the general academic work of the department. Instructor B. R. Patterson (1933) teaches wrestling and boxing, and Instructor F. J. Thompson (1937) is occupied chiefly by teaching the various gymnasium activities.

Director Ahearn is fortunate in having as his assistant Mr. Frank L. Myers, who with imperturbable good temper and fine ability meets the many trying situations that arise in a department of this kind.

While in general this history does not take account of individuals who have come and gone after relatively short periods of service, athletic coaches are in a class by themselves in that they are especially subject to a heavy rate of mortality. If they do not produce winning teams, they are regarded too frequently as incapable, and become too unpopular to be retained. If they produce winning teams, they attract the attention of other institutions which call them to higher salaries. In either situation a change takes place. Hence, to complete the record as to head football coaches during this period, note is made that the very popular and able coach, Chas. A. Bachman, who September 1, 1920, had followed Adolph G. Schulz (1916), was succeeded July 1, 1928, by Alvin N. "Bo" McMillin. Coach McMillin did much hard work and suffered some keen disappointments, but his ability was such that he was taken away from us, and was succeeded July 1, 1934, by Lynn O. Waldorf. Coach Waldorf with his great dynamic force and personal charm led the football team to the "Big Six" championship. How much of this depended on what was transmitted by his predecessor will never be known, but his unquestioned ability brought to him an offer that was too much to resist, and he resigned after a service of one year.

Professor Waldorf's chief assistant in coaching football was Wesley L. Fry, who was employed on Coach Waldorf's recommendation, and it was a natural procedure to promote him to the head

position. This was done, effective July 1, 1935, and he still (1939) gives good service in that capacity.

Assistant Professor Charles W. Corsaut (1923) may also be mentioned here as one who gave good service for ten years within this period, and whose retirement in 1933 in the interest of economy was no reflection upon him as a man, or in respect to his work as a teacher or a coach.

In the women's section of this department Assistant Professor Ruth Morris (1923) was at the head at the beginning of this administration and remained until 1928. She was succeeded September 1, 1928, by Miss Helen G. Saum, who has since that date carried the work with initiative and high ability. Excellent support has been given Professor Saum by Assistant Professors Katherine Geyer (1927) and Lorraine Maytum (1931), and others. As the young women have no intercollegiate athletic contests, no coaches become storm centers in this section, and the members of the staff are free to carry on without complications the important work of conserving, developing, and correcting the physiques of the students in their charge.

Within this period the department of physics has exhibited an almost complete lack of change in professorial personnel. Associate Professor E. C. Converse (1919), an excellent teacher, died January 22, 1927, after a lingering illness. Assistant Professor Mary F. Taylor (1919) resigned from this department to become assistant professor of home economics September 1, 1928. She had been in charge of household physics. Professor George E. Raburn (1910), because of ill health, was placed on half time for a semester beginning September 1, 1929. Since then his service has fluctuated more or less, but he is still on the staff on a part-time basis.

Professor John O. Hamilton (1901), head of the department from 1908, on account of failing health, was placed on a half-time basis July 1, 1937. After a short illness he died August 9, 1938, from an attack of angina pectoris. He had been a valuable member of the faculty, his service not being restricted to his department, but extending to laborious work on the committee on student honors, the committee on the Waters loan fund, and others. He left a bequest of \$6,000 as a student loan fund.

Dr. Alvin B. Cardwell was employed as professor of physics July 1, 1936, became head of the department one year later, and has taken up ably the duties of this position.

In addition to Professors Cardwell and Raburn, the staff in this department consists of Professor E. V. Floyd (1911); Associate Professors W. R. Brackett (1919), E. R. Lyon (1921), E. K. Chapin (1923), and J. H. McMillen (1937); and Assistant Pro-

fessors L. W. Hartel (1920), G. W. Maxwell (1927), Madalyn Avery (1928), and Leo Hudiburg (1930).

The department of public speaking, with Dr. Howard T. Hill (1920) still at its head, has a staff which effectively conducts its diverse activities. This includes Professor H. B. Summers (1923); Associate Professors H. Miles Heberer (1925) and Kingsley W. Given (1930); Assistant Professor W. C. Troutman (1937); and Instructor N. C. Webster (1937). The numerous public appearances of these men, in addition to their regular duties, have made them widely, favorably, and gratefully known. Except the members of the music department, probably no other group is more frequently called upon for extra-institutional service.

The department of zoology owes its wide-spread influence to the professional eminence of the members of its staff, and to their continuity in service. Those of professorial rank are Professors Robert K. Nabours (1910), Mary T. Harman (1912), and James E. Ackert (1913); Associate Professors E. J. Wimmer (1928) and E. H. Herrick (1935); and Assistant Professors M. J. Harbaugh (1929) and A. L. Goodrich (1929). These are supported by instructors and usually a number of graduate teaching or research assistants. The department is noted for its graduate work, and Dr. Ackert gives much of his time to his duties as dean of the Division of Graduate Study. The staff suffered an important loss in the death of Dr. George E. Johnson (1924), March 18, 1935.

DIVISION OF HOME ECONOMICS

Dr. Margaret M. Justin was dean of the Division of Home Economics when President Farrell's administration began. She had been in office two years, following Dean Thompson, July 1, 1923. She came with little experience in college teaching or administration, and her first care was to conserve and to consolidate the advances in the Division that had been effected by Dean Thompson. After becoming sure of herself, she launched out on her own judgment in the initiation of changes in organization and personnel that seemed to her to be in the interest of progress. Through her great ability and amazing energy she has led the Division with much success. She has to a considerable extent administered it as a unit rather than as a coordination of distinct departments.

An annual event of the Division of Home Economics was inaugurated April 27, 1931, as an "Open House" with exhibits by each of the departments, contests among groups of high-school girls, a tea, and a banquet. The next year the event was designated as "Hospitality Week," and, with enlarged scope, presented the

theme "From Godey's Book Days until Now." In 1937 the name of this project was changed to "Hospitality Days."

The purpose of Hospitality Days is the interpretation of home economics as taught at the College, to high-school girls, college students, faculty, and townspeople. Attendance has been good, and exceeded 3,600 in 1939. The program includes: presentation of elaborate exhibits; a College assembly with an outstanding speaker; contests for high-school girls in the fields of art, child welfare, clothing, foods, and home living; conducted tours for inspection of home economics departments and exhibits; and teas, a dinner for home economics students, and a hospitality hop. Girls from high schools have primary consideration. Seventy-eight high schools were represented in 1939 by 1,192 girls. The students from 42 schools entered contests.

The programs of Hospitality Days are planned, prepared, and presented almost entirely by students in the Division of Home Economics, and this work is of high educational value to them in several ways. A special theme is chosen each year as a unifying influence in carrying out the project.

Dean Justin has greatly enlarged the inquiries and records concerning the personal history of students in this Division. The purposes are in part, to aid the student in making advantageous adjustments, and in choosing her vocation. The dean assembles data which may suggest assignment of duties, or extending of opportunities of a special character, to a student for her development. Information compiled also provides a continuous check on environmental conditions as related to the needs of individuals, and may indicate the need of changes in courses or curricula. It is also of vital importance in successful placement of graduates.

Doctor Justin has consistently followed the practice of attending the meetings of organizations of those occupied in one part or another of the field of home economics, and the value of her participation in the discussions and activities of these organizations has been recognized by her appointment to important committees, and election to high offices in them.

Dean Justin also makes contacts with commercial and professional institutions which use women trained as are the graduates from curricula administered by her in this College. Through these contacts the dean has been able to act with unusual wisdom in the selection of members of the staff, in modifications of curricula and the addition of courses, and in the placement of graduates. Since 1923 the number on the staff of the Division has increased from 27 to 50, and the students of college rank enrolled in the Division from 549 to 769.

Professional ambition in members of the staff has been evinced in the writing of books, and in obtaining leaves of absence to study for advancement or higher degrees. The scope and the quantity of research done in the Division have been much increased largely through allotments of Purnell funds.

In the organization of the Division, the four departments existing in 1923 have been enlarged to six by dividing the department of household economics into three. The new departments are designated as institutional management, and child welfare and euthenics. The word "applied" was dropped from the name of the department of "applied art." These changes were not made all at one time. As now organized the departments of the Division are: art, child welfare and euthenics, clothing and textiles, food economics and nutrition, household economics, and institutional management.

The changes in personnel in the Division of Home Economics have been very numerous. In the department of art, Miss Araminta Holman (1913) resigned as head July 31, 1930, and was married. Miss Ethel Arnold (1922) was made chairman of the committee in charge of the department, but died October 27, 1931. She was succeeded by Associate Professor Dorothy Barfoot (1930), who in 1935 was made head of the department and still serves as such, and has the rank of professor. Others of professorial rank are Associate Professor Louise H. Everhardy (1919), and Assistant Professors Maria Morris (1925), Vida Harris (1927), and Rose Marie Darst (1933). These have all been promoted from positions of lower rank.

The department of child welfare and euthenics, created in 1927 by separation of field and responsibility from the department of home economics, was headed by Professor Helen W. Ford (1926). She continued to perform the duties of the position with enthusiasm and ability until her resignation because of ill health, effective May 31, 1938. For 1938-39 the staff included Associate Professor Leone B. Kell (1927), Assistant Professors Jennie Williams (1932) and Margaret Raffington (1938), and others of lower rank.

Professor Louise P. Glanton, head of the department of clothing and textiles from 1920, was on leave of absence for the year 1924-25, and did not return. Professor Lilian C. W. Baker, who had been appointed to serve during Miss Glanton's absence, succeeded to the position and remained until June 30, 1931, when she was given leave of absence for the next year and did not return. Associate Professor Alpha C. Latzke (1929) was appointed acting head for 1931-32 and became head September 1, 1932. She received the rank of professor in 1935, and is still (1939) serving with eminent success.

Of professorial rank in this department are also Associate Professors Ina F. Cowles (1902) and Katherine J. Hess (1925), and Assistant Professors Esther M. Cormany (1936) and Hazel M. Fletcher (1937).

Prof. Martha S. Pittman has continued to head the department of food economics and nutrition, and Dr. Martha M. Kramer was advanced to be a professor in 1925. The department at present (1939) also has on its staff Associate Professor Gladys Vail (1927), Assistant Professor Eva McMillan (1930), and Assistant Professor Nina Browning (1930), and several of lower rank. Miss Margaret Ahlborn, who from a graduate assistantship in 1923 had by successive promotions reached the rank of professor and assistant dean, resigned in 1937.

Professor Amy Jane Leazenby Englund, head of the department of household economics, resigned May 31, 1926, and was succeeded by Professor Helen W. Ford, September 1, 1926. Doctor Ford served in this capacity until July 1, 1928, when she was made head of the newly established department of child welfare and euthenics.

Following the transfer of Doctor Ford, Dean Justin was head of the department of household economics until September 1, 1938, when it was taken over by Dr. Ruth Lindquist. The staff also includes (1939) Associate Professor Myrtle A. Gunselman (1926), Assistant Professor Anna Tessie Agan (1930), and others.

Following the resignation of Professor Amy Jane Leazenby Englund, occasion was taken to separate the management of the cafeteria from the department of household economics, and to create the department of institutional economics with Dean Justin as its head, effective July 1, 1926. At this time Assistant Professor Wilhelmina Bates (1922) resigned to be married. She had been in direct charge of the cafeteria since September 1, 1924, with Miss Elma R. Stewart as her assistant. Upon the resignation of Miss Bates, Miss Stewart succeeded to the management of the cafeteria, September 1, 1926, and continued in that service until August 31, 1928, in the meantime becoming Mrs. H. L. Ibsen.

A significant loss to this department occurred in the death of Miss Alice H. Mustard (1926), assistant professor of institutional economics. Miss Mustard had been designated to become professor, and head of the department, and went to Columbia University for study the summer of 1928. While there she died following a short illness. This was a tragic termination to a promising career.

September 1, 1928, Mrs. Bessie Brooks West became professor and head of the department of institutional economics, and manager of the cafeteria, and has continued to head this work since.

In 1936 the department name was changed to "institutional management." The growth in scope of the activities of the department has been notable under Mrs. West's administration, which has been very effective in all respects.

On September 1, 1928, the department received another valuable addition to its staff in Miss LeVelle Wood, who came as assistant professor of institutional economics. Miss Wood is employed to a large extent in the management of the subsistence facilities of Van Zile Hall. Since September 1, 1934, Instructor Florence E. James has been the efficient director of the cafeteria.

DIVISION OF VETERINARY MEDICINE

The Division of Veterinary Medicine continues to be under the able, vigilant administration of Dean Ralph R. Dykstra (1911), and there is no more closely knit and efficient organization on the campus, nor one with a better *esprit de corps*. To this, to a large extent, may be ascribed the growth of the Division, and the unequaled loyalty of its alumni. The staff has been increased from eleven to eighteen in number since 1925, and is organized in the three departments: anatomy and physiology, pathology, and surgery and medicine.

The department of anatomy and physiology has had Dr. J. H. Burt (1909) as its head since 1919, when the department of veterinary medicine was expanded to become a Division. Professors W. M. McLeod (1919) and E. E. Leasure (1926) are also on the staff of this department.

In 1919 Professor Herbert F. Lienhardt (1917) was made head of the department of pathology, being transferred from the department of bacteriology. At that time he had the rank of assistant professor, but became a professor in 1920. He continued as head of this department until his death November 11, 1937, after a long and painful illness. He was only 43 years of age and was one of the most valuable members of the Divisional staff. Dr. Lee M. Roderick was chosen as his successor, effective June 1, 1938. Others of professorial rank on the staff are Professor Chas. H. Kitzelman (1919); Associate Professors Herman Farley (1929) and Chas. C. Morrill (1935); and Assistant Professors Walter W. Thompson (1936) and John H. Whitlock (1934).

In 1925 Dr. Joseph P. Scott (1916) was an associate professor in this department, but had given part of his time to the department of surgery and medicine from 1919 to 1925. He had leave of absence from April 21, 1936, to June 30, 1937, but did not return.

Dean Dykstra in 1925 was head of the department of surgery and medicine, and Dr. Edwin J. Frick (1919) was an associate

professor. Part of their time was given to this department by Associate Professors J. P. Scott, of the department of pathology, and W. M. McLeod, of the department of anatomy and physiology. While Doctor Dykstra is still counted as on the staff, Professor Frick is the head of the department, and Dr. Edward R. Frank (1925) is an additional professor.

DIVISION OF COLLEGE EXTENSION

The personnel of the Division of College Extension was very greatly enlarged because of cooperative service with the United States Government, especially the Agricultural Adjustment Administration. The increased cost was met by the Government, and the additional persons involved will not be named here. Many of the regular staff performed important service in this connection. In order to avoid disjointedness these individuals were given some attention in Chapter IX. The problem of housing the largely increased number on the office force was met by leasing the building belonging to the Manhattan Bible College. This is at the southwest corner of Anderson Avenue and Fourteenth Street.

GENERAL COMMENTS

The survey of the changes in personnel made by the writer in preparing this incomplete presentation has given him a vivid impression of the essential stability of appointments to the faculty of this College when those of professorial rank are considered. In the lower ranks it is to be expected that migrations to better positions in other institutions will be more frequent, and perhaps that separations because of lack of fitness will be more likely to occur.

It would be a pleasure to consider more in detail the individuals of this permanent nucleus of the faculty, and to exhibit the special features of excellence which would be found which account for and justify permanence of tenure. This would entail months, or perhaps years, of study and many pages of text, and, however pleasant a project, it is not possible to carry it out.

The practice of publishing in the biennial reports of the Agricultural Experiment Station, lists of the productions printed within the respective periods by members of the staff, is being continued, and they constitute a truly impressive body of evidence that the faculty members are active and productive. Similar lists for those not on the Station staff might not average as high in number, but they would be significant.

Other channels of publicity are the reports of the Kansas Academy of Science, and of other scientific and professional organiza-

tions, the journals of such societies, and the columns of magazines and newspapers.

Testimony may be recorded here to the notable spirit of friendliness and cooperation which prevails almost without exception



IN THE PRESIDENT'S HOME

President Farrell in his study. The desk is one used by the professor of agriculture in the earlier days of the College.

among the departments of the institution and within the staffs of the several departments. Exhibitions of jealousy and depreciating or nasty comments upon colleagues are almost unknown.

Doctor Farrell has held the office of president of the College for a longer period than any of his predecessors held it except President Fairchild. No revolutionary features have marked his administration thus far, but recent years have brought many occasions for grave concern especially because of financial stringency in the State due to prolonged adverse agricultural conditions. President Farrell has met these, and all others, with poise and wisdom. As shown by the preceding pages, his general attitude is one which approves changes that bring progress, but he leans strongly toward conservation of that which has been found workable and productive of good results. He is safe, sane, judicial-minded, and fair to his associates. A logical thinker on serious topics, he is abreast of the times, and alert to their significance and trend. Kansas State College will be jealously guarded, and ably and progressively guided, as long as he remains at its head.

CHAPTER XII

SPECIAL ARTICLES

LAND PURCHASES FOR THE COLLEGE

THE 100 acres of land upon which the Bluemont Central College building was situated, and which was deeded to the State of Kansas June 10, 1863, as a site for the college of agriculture and mechanic arts, soon proved to be unsuitable for some of the agricultural needs of the institution. In seeking additional land, the possibility of obtaining the Manhattan city park was considered. Legal difficulties, fortunately, seem to have prevented carrying out that plan.

The legislature of 1871 passed an act authorizing the township of Manhattan, Riley County, to issue bonds to an amount not to exceed \$25,000, to be expended in the purchase and equipment of a farm near Manhattan, for the use and benefit of the College. This, however, required favorable action by the voters of the township before bonds could be issued. Such action was taken in April and provision was made for the issue of bonds to the amount of \$12,000, payable in ten years and bearing interest at seven per cent per annum.

With the bonds given by Manhattan township, the Regents purchased five tracts of land. Three of these, tracts 3, 4, and 5 on the accompanying map, purchased July 11, 1871, now constitute the campus. The northwest corner was deeded by Charlotte S. Preston, widow of Prof. N. O. Preston, in consideration of the payment of \$7,000 for the forty acres more or less. This tract is lot 22, section 7 T 10 R 8. There was a good stone residence on this property, which became the residence for the president of the College, and is now part of the College infirmary.

The northeast forty acres of the campus, lot 23, section 7 T 10 R 8, was purchased for \$6,000 from Rev. Elbridge Gale. Part of this tract was occupied by a commercial nursery. A frame residence on the land became known as the old Gale house, and later by other designations. It served as a residence for the farm foreman for many years, but gradually fell into disrepair and was let to tenants until its destruction by fire, December 12, 1898. The public road was laid out to run north from Manhattan Avenue by such a route that it cut off a strip along the east side of this tract. This is now occupied by a forest plantation, but is available for more useful purposes.

The south half of the campus was purchased from Jane G. Foster and her husband E. L. Foster for \$12,500. This includes lots 3 and 4, section 18, T 10 R 8, except 150 feet along the east side of lot 3. A residence occupied a spot just north of the site of Anderson Hall. This was used to a certain extent by the College as a residence for farm foremen. It was razed in 1880. Two large cedar trees that were near it still survive. The well which was served by the old pump was filled up in 1937. The previous owner of the land, Mr. C. E. Blood, sold to the Manhattan Town Company, a strip from the east side 150 feet wide to fill out the adjacent city lots and provide 80 feet for that part of Manhattan Avenue. That reduced the area conveyed to the College to 75 acres. The total campus area, including parts in the highways, is 155 acres.

The full sixty feet of the highway on the south side of the campus was taken from the College tract. It is now Anderson Avenue, and through clumsy surveying, or otherwise, private landholders have encroached along the south side of the avenue.

On the same date that the campus square was purchased, the Board bought of Jesse Ingraham, the north half of the southwest quarter of section 13 T 10 R 7, 80 acres, more or less, for \$3,440. July 13, 1871, it bought the south half of this quarter-section from R. C. Walters for \$3,440, thus completing a holding of 160 acres, much of which was in the Wildcat valley. However, for reasons that do not appear in the records, the entire tract was sold to Jesse Ingraham July 27, 1872, for \$7,200.

After a few years the need for additional land was met in part by leasing. July 22, 1881, a tract of 16 acres in lot 19, section 7 T 10 R 8, north of the campus, and marked 6 on the map, was purchased of J. N. Limbocker at forty dollars an acre. Income from the endowment fund was used for this purchase without previous authorization by the legislature. The legislature of 1885 authorized the Board of Regents to invest not to exceed ten per cent of the net income from the endowment fund for 1884 and 1885 in land for farm purposes. Under this authorization, five tracts, Nos. 7-11 on the map, totaling 44 acres in area, were bought from Albert Beebe, Sarah F. Briggs and Helen M. Barnes for \$4,840. This land was in lots 18 and 19, section 7 T 10 R 8, and contiguous to the 16-acre tract purchased in 1881, and the total cost for the 60 acres was \$5,480. These five tracts were deeded August 27, 1885.

April 9, 1891, a committee of the Board of Regents reported the purchase of four acres, this being block 26 in Williston's addition to the city of Manhattan. This is tract 12 on the map, and is in lot 9, section 7 T 10 R 8, and adjoins the north side of one of

the previous purchases. The cost was not recorded in the minutes of the Board, and there is no record of the deed.

September 24, 1893, in consideration of \$1,500, the College received a deed to tract 13, four acres in lot 18, section 7 T 10 R 8, from the estate of E. W. Auld. This tract was accompanied by a residence which is now used by the superintendent of the poultry plant.

By deed dated May 23, 1903, Sarah F. Briggs conveyed eight acres lying west of the Auld tract, No. 14, the consideration being \$1,200. This completed the purchase of lots 18 and 19 in section 7 T 10 R 8, an 80 acre tract immediately north of the campus, with the exception of eight acres on the west side.

July 3, 1903, Carrie V. Shumway and J. M. Shumway, in consideration of \$500, deeded to the State of Kansas block No. 25 in Williston's addition to the city of Manhattan. This is in lot 9 of section 7 T 10 R 8, and is 3.1 acres in area, and is No. 17 on the map.

Under date of August 7, 1903, Isaiah G. Williston deeded 95.8 acres to the College, tracts 15 and 16, receiving \$8,800 therefor. This included all of Williston's addition to the city of Manhattan except blocks 24, 25 and 26, and consisted of parts of lots 4, 5, 8 and 9 in section 7 T 10 R 8 of the government survey. In the deed the tract is described minutely by metes and bounds. For several years the College had been using this land under leases.

The need of the College for additional land, especially for the use of the Agricultural Experiment Station in long-time projects, led to an appropriation of \$35,000 to meet this situation in part by the legislature of 1909. This made possible the purchase of the present agronomy farm, tracts 18 and 19, but the sum must have been supplemented by other funds. Two quarter sections were purchased, which constitute the main agronomy farm, and upon the south one the residence of the farm superintendent and other buildings are located. This south half of the farm is the southeast quarter of section 1 T 10 R 7. It was purchased from Oliver A. Hutchings, and is known to many as the Knipe home. The cost was \$150 per acre. The north half of the farm was purchased of Marlow W. Ingraham at \$135 per acre and is the northeast quarter of section 1 T 10 R 7, and is said to contain 161.8 acres.

In the Nineteenth Biennial Report, 1912-1914, a comprehensive argument was presented supporting the statement that "the need of more land is most urgent for the future progress and development of the work in animal husbandry, dairy husbandry, poultry husbandry, and veterinary medicine ***." The next Biennial Report included a similar presentation. The legislature of 1917 responded with an appropriation of \$80,000. The availabil-

ity of this sum led to an increase in the value set by the owners of tracts of land near the College such that recourse was had to condemnation proceedings. The commissioners of appraisement consisted of G. H. Failyer, S. J. Yenawine, and W. H. Donaldson.

Independently of the proceedings in condemnation, the Board bought of Cornelia H. Leicester, tract 20, 28.74 acres for \$6,000.



DAIRY HUSBANDRY BARN AND ADJACENT BUILDINGS

This is a general view of buildings situated on the west part of the area north of the campus. The main dairy production barn is shown with the smaller buildings used in connection with it.



VIEW OF PART OF THE AREA NORTH OF THE CAMPUS

Most of the buildings shown in this view are used by the department of animal husbandry. The third stone barn is the main structure in the center of the picture. The old veterinary clinics building is in the foreground, and the sheep barn is at the right.



ANOTHER VIEW TO THE NORTH OF THE CAMPUS

This cut shows at the left the third stone barn used by the department of animal husbandry and at the right, the sheep barn. Between them are several smaller buildings.

This was lot 7 in section 7 T 10 R 8. The west line of sections in range eight are oversize, and are divided into "lots" instead of the customary "quarters." The lots are each forty acres in area excepting the ones on the west side of the sections. All deficiencies are thrown into those lots. Lot 7 is one of these, and this accounts for its fractional area. The same circumstances explain the areas of five



VIEW IN THE POULTRY PLANT

It is impossible to take a photograph of the poultry plant as a whole. This view is one looking south through the main drive. The poultry farm is at the east end of the area north of the campus.



THE THIRD STONE BARN

This barn was erected in 1914 at a cost of \$25,000 and in addition the building material from the second stone barn, which was razed at that time. It is used by the department of animal husbandry and is located on the land north of the campus.

lots to the north of this one, also owned by the College. The Leicester tract was deeded September 17, 1917.

After the fixing of prices by the commissioners, the Board selected tracts March 5, 1918, as follows:

Lot 6 in section 7 T 10 R 8, tract 22, 28.19 acres, owned by Minnie Colt Smith; cost, \$7,100.

Lots 7 and 8 in section 6 T 10 R 8, tract 25, 54.1 acres, owned by Roy G. Chandler; cost, \$9,500.

Lots 6 and 9 in section 6 T 10 R 8, tract 26, 79.92 acres, owned by J. G. Matter; cost, \$10,200.

Forty-three and one-half acres in lots 4 and 5, in section 7 T 10 R 8, tract 23, owned by W. W. Bales; cost, \$6,600.

One acre in lot 5 in section 7 T 10 R 8, tract 24, owned by J. P. Brubaker; cost, \$1,300.

The northeast quarter of section 12 T 10 R 7, 160 acres, tract 21, owned by heirs of Washington Marlatt; cost, \$38,400.

The acquisition of land 1917-18 totaled more than 395 acres, but did not provide as much pasture land as desired, and leasing continued.

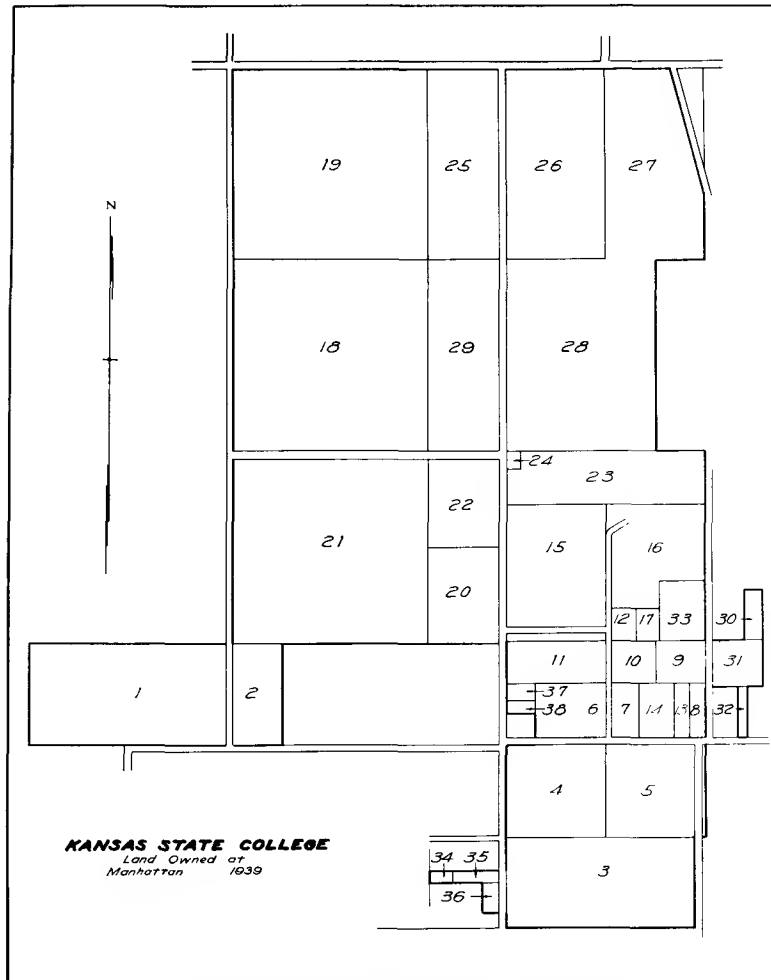
The legislature of 1921 appropriated \$52,000 to provide additional land, which financed the purchase of four tracts. The most important of these was 247.28 acres of pasture land, tracts 27, 28 and 29, purchased of Esther H. Robinson. This is situated in section 6 T 10 R 8, and includes all of lots 17, 18, 19 and 20 and the west half of lots 16 and 21; also lots 5 and 10 excepting about 8 acres east of the public highway which cuts off a long triangle from the east side. The purchase price of this tract was \$37,500.

For the location of a rifle range for the department of military science and tactics, and the housing of certain military equipment, an irregular tract was provided by the purchase of three small parcels of land, tracts 30, 31, and 32. These are in section 7 T 10 R 8. The C. A. Streeter tract was the largest, being the northwest quarter of lot 17, ten acres, and was obtained at a cost of \$10,000. The E. L. Hanlin tract, four acres, is the east four tenths of the southwest quarter of lot 10. Its east line runs north from the northeast corner of the Streeter tract. The cost was \$3,000. The Elizabeth Hanna tract of one and one-half acres, which cost \$1,500, is 99 feet wide and extends southward to the public highway from near the middle of the south line of the Streeter tract. This combined area made it possible for the military department to use ranges up to 400 yards, but it is no longer employed in that way. Most of the tract is used by the department of agronomy.

The remainder of the Williston place including the residence and other buildings, tract 33, was bought in 1925 of John E. Gish for \$12,500. It is 11.86 acres in area and constituted block 24 of Williston's addition to the city of Manhattan, and is part of lot 9 in section 7 T 10 R 8. This tract is used by the department of poultry husbandry.

The Board also purchased in 1925, three small tracts for use as field laboratories by the departments of botany and entomology.

These are west of the stadium and situated in lot 5 of section 18 T 10 R 8, but described by metes and bounds too long to quote here. The Ruby Moseley tract of two acres, No. 36, cost \$3,100; the J. T.



COLLEGE LAND OWNED NEAR MANHATTAN

On the map shown above, the tracts are numbered in the order in which they were acquired by the College.

Payne tract of one acre, No. 34, cost \$1,200; and the W. R. Hays tract of 2.115 acres, No. 35, cost \$2,643.75.

The Board at that time planned to purchase four acres of Mrs. Dale A. Smiley situated north of her residence and along the west

side of lot 19, section 7 T 10 R 8. Available funds, however, did not permit this, and 2.4 acres, tract 37, were obtained for \$3,000. The legislature of 1927 appropriated \$2,000 with which the remaining 1.6 acres were purchased, tract 38, and this became the site of the dairy production plant erected in 1933.

This completes the outline of College purchases of land near Manhattan. The accompanying map shows these, and it will be seen that the holdings are in a compact body, rather conveniently located for the uses for which the several tracts were acquired.

USES MADE OF LAND OWNED

The tracts of land near Manhattan owned by Kansas State College are now (1940) used as stated in the succeeding paragraphs. The numbers used correspond to those on the accompanying map.

Tracts 1 and 2 constitute the old College farm, and were donated to the State by the Bluemont Central College Association as a site for the Kansas State Agricultural College. The Bluemont building stood near the southeast corner of tract 1. About 30 acres in the northwest corner of tract 1 are now being fitted for use as a pasture by the department of dairy husbandry; the remainder, is the farm of the department of horticulture. Tract 2 is used for the production of feed for the dairy herd.

Tracts 3, 4 and 5 make up the main campus, and were purchased in 1871 using funds donated by Manhattan township. The north line of tract 3 passes between Education Hall on the north, and Engineering Hall on the south. The line between 3 and 4 passes through the Library and the Stock Judging Pavilion. About six acres in the northwest corner of 4 are used as a pasture for the dairy herd. Small areas on the east side of 3 and 5 are used by the department of horticulture for the propagation of trees and flowering plants and experiments with trees, flowers and vegetables. The stadium and athletic fields occupy most of the west half of 3, and baseball diamonds require much of the west part of 4. The remainder of these three tracts is occupied by College buildings and grounds.

The department of dairy husbandry uses tract 6 and the west part of 11, and part of 4 as pasture; 20 for pasture and feed production; 2, and the east part of 21 and most of 22 for production of feed; and 37 and 38 for feed yards and sites for the dairy barn and other buildings.

Pastures for the department of animal husbandry are provided by 7, the east side of 11, most of 14, 15, 16, 21, 23, 25 and 26, and by 24, 27, 28 and 29. The department produces feed on the west part of 21, and on parts of 23, 25, and 26, and uses 10, 12, 17 and

parts of 15 and 16 for feed yards and sites of barns. This department also has the use of the residences situated on 21, 23, and 31.

The department of agronomy uses tracts 18 and 19 for experimental work with crops and soils, 30 for grass experiments, and part of 31 for additional experimental work. It also has about 8 acres in the northeast corner of 22 for use as a nursery for cereal crops. The superintendent's residence and the farm buildings are situated on the southern part of tract 18.

In addition to about 50 acres in tract 1, the department of horticulture has tract 32 for the propagation of trees, and has much of the campus and grounds for experimental plantings of material, and for permanent landscape features.

The plant of the department of poultry husbandry, including numerous small buildings and ranges, occupies tracts 8, 9, 13 and 33, and the east part of 14. It also uses the residences on tracts 13 and 33.

Tract 34 and the south end of 36 are used by the department of entomology; and 35, the north end of 36, and part of 31 by the department of botany for investigational work.

The land and buildings for laboratory research in veterinary medicine occupy an area in the northeast part of tract 16.

The department of agricultural engineering is using about an acre at the east end of tract 23 in a test of the durability of fencing materials.

MEMORIAL STADIUM

An improvement of the first rank that was acquired within a recent period is the Memorial Stadium. At the close of the World War with its horrors and its human sacrifices still fresh in the public consciousness, the College circle was eager to do something that should be a worthy memorial to our soldier dead.

COMMITTEE ON MEMORIAL

President Jardine addressed this letter to a group of the faculty, April 7, 1919:

I am asking that you accept membership on a committee to consider the matter of what action if any, we, as a faculty or as an institution, should take towards erecting on the campus of the college a suitable Memorial to the soldiers who have fallen in battle and who were at one time students at this institution. I am appointing Prof. L. A. Fitz as chairman. I hope that you will accept this appointment and that the committee will come together at an early date. Immediate action is very important.

In addition to the chairman, Prof. Leslie A. Fitz, the committee included Deans Helen B. Thompson, Harry J. Umberger, and J. T. Willard, and Professors Frances L. Brown, Albert Dickens, H. W. Davis, R. A. Seaton, C. F. Baker, and H. L. Kent. It should be noted that President Jardine did not limit the memorial to victims of the World War, and the general discussion favored including those of other wars.

This committee met, and the general sentiment at that time was in favor of a union building for student use, and Professor Baker undertook tentative planning of such a building, and plans were drawn by Myron E. Johnson, '19, a senior student in architecture. This was noted in the *Industrialist*, June 25, 1919. It was suggested that a suitable building might cost a quarter million dollars. Perhaps on that consideration the project languished and seems to have been forgotten.

The directors of the Alumni Association instituted a movement in 1919 to collect a fund for a memorial to men of the College who had died in the nation's wars. A committee which was appointed did not have much success. The list of pledgings which it secured was lost. Collections amounted to \$135.50 paid by 17 persons. Clerical expense cut the net amount to \$105.06, which the directors in June, 1922, voted to transfer to the K. S. A. C. Stadium Corporation.

SECOND COMMITTEE ON MEMORIAL

President Jardine appointed another committee December 15, 1921. This action followed more or less discussion with persons interested, and members were appointed as representatives of definite groups. Considerable publicity had been given to our need for a stadium, and to the possibility of financing the erection of one. Other institutions were erecting memorials, and, three years after the signing of the armistice, Kansas State was lagging. The President's letter follows:

For the Athletic Board: Professor King (Chairman of the Committee), Professor Ahearn, Dean Seaton.

For the Alumni: Dean Willard, Dean Umberger, Secretary Stratton.

For the Faculty: Dean Farrell, Dean Thompson, Dean Dykstra, Professor Cortelyou.

I hereby appoint the above named persons to serve as a committee to work out methods of procedure, time of action, etc., that this institution should follow in obtaining subscriptions to a fund for the erection of a proper memorial to our graduates and students who gave their lives in the

World War. This committee will also have full authority to work with representatives of organizations, both in and out of the city, that manifest an interest in the successful accomplishment of this enterprise. I hope all of you will serve on this committee and that we may have your recommendations at an early date.

In this commission the president expressed no preference concerning the nature of the memorial, leaving that matter to the judgment of the committee. He evidently thought the time for action had fully come, and also realized that the project was one of such magnitude that the current college population could not hope to finance it alone.

A STADIUM APPROVED AS A MEMORIAL

The committee met soon, and after some general discussion voted to recommend to the president the erection of a stadium as the most suitable memorial to the untimely dead.

This committee included some who while recognizing the service of athletics believed that there is always a strong tendency to exaggerate the importance of such sports, especially in their inter-collegiate development, with accentuated emphasis on the importance of winning games. Practical unanimity in the committee rested on certain considerations presented by Dean Willard, one of the conservative members, and which it may be worth space to record. Some of the points in favor of a stadium as a memorial are:

It is Appropriate—These men fell in war; in heroic physical contest. It is fitting that a splendid facility for physical development, and an arena for physical contests should be erected as a memorial to men who were physically fit and who died in a contest where physical heroism was the ultimate basis upon which a victorious result was attained.

It Will Be a Structure of Beauty and Dignity—Its towers and walls built of beautiful native limestone will make it not merely tiers of seats, but a real building of quiet strength, harmonizing with the other buildings of the city on the hill.

It Will Be Useful—The low degree of the physical state of our young men was brought out shockingly by the examinations preliminary to acceptance for military service. This set in motion a powerful wave of demand for effective physical training. The Memorial Stadium will furnish much space for indoor sports, such as wrestling, handball, track athletics, as well as seats for viewing outdoor sports and

games, pageants, May Fetes, etc. It will also contain dressing rooms, lockers, and resting rooms for teams and thus set free for other purposes space now used for these in Nichols Gymnasium.

Athletic Sports Offer a Real Moral Safeguard to Young Men—The full-blooded, healthy young man has an excess of animal spirits that seek outlet and impel him to action. If facilities for innocent, healthful out-of-doors activity are not afforded he is much more likely to yield to the temptations of immorality and vice.

It Presents a Strong Appeal to the General Public—Everybody can understand physical activities and sports. Most people enjoy watching them and many engage in them.

Our War Heroes Themselves Would Probably Favor a Stadium as a Memorial—They were young and full of vigor, many of them athletes, and all were persons by whom physical excellence would be held in high regard. While their voices are stilled forever, it is reasonable to believe that if they could have chosen a monument before they left they would have voted for the Stadium.

FINANCING THE PROJECT

The president indorsed the recommendation of the committee. A Manhattan committee was formed to cooperate with the College committee by organizing and conducting the solicitation of funds from the business men and other Manhattan citizens not connected with the College. A sub-committee was appointed for the purpose of obtaining a charter that would create a body that would have legal rights and thus be enabled to make and enforce contracts. Another sub-committee considered the important question of the amounts that faculty members might reasonably and equitably be asked to contribute.

As with any enterprise requiring donations of money, there are many persons who are willing, and even eager, to do their part who have no sufficient basis upon which to decide how much that is. The sub-committee to consider this matter included both College and town members. On the principle that a man with a larger salary would be able, not merely to give a larger sum, but to give a greater percentage of his salary, a schedule was prepared which while not considered as a list of assessments would serve to suggest amounts that would be equitable under ordinary circumstances. It was recognized that in individual cases no contribution should be expected, and that the circumstances of others might make them

willing to contribute much more generously than the schedule indicated.

According to the schedule of subscriptions suggested by the committee, one with a salary of \$1,000 a year might give 2.6 per cent, \$26, one fourth down and the remainder in three annual payments. On a regularly increasing rate the sum suggested for a man with a \$2,000 salary was \$64.00; \$3,000, \$114.00; \$4,000, \$176.00; and \$5,000, \$250.00. A table was worked out showing the amount for each salary rate in hundreds. For each \$100 increase in the salary the rate increased six hundredths of one per cent. A meeting of the entire faculty was held April 18 in the auditorium, and addresses were made in support of the stadium project, and the plan proposed as a guide to subscriptions explained. After discussion the plan was adopted unanimously.

Tuesday, April 25, 1922, a general meeting of students and faculty was held at which enthusiasm was generated and every individual given an opportunity to sign a subscription card. Students were asked to pledge \$40.00 each, payable in four instalments. At that meeting and by noon Wednesday the students had pledged \$76,000, and the faculty, \$23,000. Carefully organized committees gave each member of the faculty and each student an opportunity to subscribe. Each solicitor was provided with a list of points for arguments that he might use in his work. The whole campaign was probably the best organized, as it certainly was the greatest in magnitude, ever conducted at the College. Credit for its success belongs to many persons, but it may not be invidious to mention the alumni secretary, Mr. Clif Stratton, and Charles C. McPherson, president of the Students' Self-Governing Association, for their part with the student body. Much was done through the fraternities, sororities, and other organizations, most of which pledged 100 per cent of their membership. By commencement the total pledges amounted to \$157,000. As the goal was \$300,000, much remained to be done.

K. S. A. C. STADIUM CORPORATION CHARTERED

The charter of the K. S. A. C. Stadium Corporation named H. H. King, M. F. Ahearn, Carl E. Floersch, Roy A. Seaton, and Clif Stratton as the first board of directors. The board met May 3, 1922, and elected H. H. King president, M. F. Ahearn vice-president, Clif Stratton secretary, and Carl E. Floersch treasurer. A committee on bylaws was appointed which included Directors Ahearn, Floersch, and Stratton, and two men outside the board, Judge Fred R. Smith and Dean J. T. Willard.

At the next meeting of the board, May 22, it was voted to in-

crease the number of directors to nine and to have the charter amended to that effect. Bylaws were adopted incorporating this provision.

The bylaw in respect to the nine directors was admirably framed to insure intelligent cooperation of the alumni body, the College students and faculty, and the non-college population of Manhattan. Three members were to be elected by the board of directors of the Alumni Association; three were to be appointed from the College faculty by the president, one of these to be nominated by the Student Council of the Students' Self-Governing Association; and one each was to be appointed by the City Commissioners of Manhattan, the Chamber of Commerce, and the Manhattan Clearing House Association.

June 13, 1922, the directors of the Memorial Stadium Corporation met. The charter was reported as amended to provide for nine directors, and the secretary, Clif Stratton, presented the following certificate:

The following members of the K. S. A. C. Memorial Stadium Corporation have been properly appointed in accordance with the by-laws of the Corporation:

By President W. M. Jardine from the College Faculty, H. H. King, M. F. Ahearn, John V. Cortelyou.

By the board of directors of the Alumni Association of the Kansas State Agricultural College, Roy A. Seaton, '04; J. T. Willard, '83; J. W. Berry, '83.

By the City of Manhattan, Clarence E. Johnson.

By the Clearing House Association of Manhattan, Carl E. Floersch.

By the Chamber of Commerce of Manhattan, H. W. Brewer.

The new board organized by the election of H. H. King as president, Clarence E. Johnson vice-president, J. V. Cortelyou secretary, and C. E. Floersch treasurer. The personnel of the board has changed very little in the course of the years, and Doctor King has been president and Mr. Floersch, treasurer, up to the present (1939). Doctor Cortelyou performed the delicate and arduous duties of secretary most admirably until June 30, 1934, when he resigned from the college faculty, and H. H. Haymaker succeeded him on the board and as secretary. The entire charge of attending to the collection of pledges, payment of bills, and many other details falls upon the secretary. The highly important post of treasurer is still held by Mr. Floersch, whose probity and business judgment have meant much in securing the support of the business men

of Manhattan, without whose assistance the stadium project could hardly have been financed.

WEST WING OF STADIUM ERECTED

The general plan for the stadium was worked out by Prof. L. E. Conrad, head of the department of civil engineering, and detailed plans and specifications were prepared under his direction.

After repeated advertising for bids and consideration of several different proposals, the board of directors awarded the contract



MEMORIAL STADIUM

This view exhibits as much as can be shown in one photograph. It is seen looking southwest from Engineering Hall. On the seating deck of the west stadium, the superstructure provides boxes for guests and representatives of the press.

for construction of the west wing of the stadium to Mr. Walter B. Stingley for a base price of \$45,000, plus 10 per cent for his services and use of all necessary equipment. Provision was made for a penalty or bonus in case the cost should be more or less, respectively, than the base price. The board strongly desired that the construction be completed by October 21, 1922, in order that the stadium might be ready for the homecoming game with the University of Kansas team. However, only part of it could be used for that game, October 28, the historic date when "the jinx" was buried by a 7 to 7 score. The first use of part of the stadium was in the game with Washburn, October 14, 1922. This wing of the stadium was not accepted by the stadium board until September 7, 1923.

The watercourse which crossed the southwest corner of the campus had been diverted to a channel north of the football field by the work done by the students and faculty on the field day holiday, December 7, 1916. The location of the stadium made it necessary to carry any water under it and the playing field by means of a storm sewer with intake west of the stadium. A contract for this work was made with W. B. Stingley, the cost to be \$95.00 for the intake and \$10.60 per lineal foot for the sewer. This connected with the storm sewer on Anderson Avenue, constructed in 1914. At the same time, December 5, 1922, Mr. Stingley was also awarded a contract for grading.

The directors of the stadium corporation were always especially cautious in undertaking contracts. Money has been borrowed for the major undertakings, but only on the security of notes that seemed safely certain to be paid within a short period. The Manhattan banks supported a conservative board in this attitude, and advanced thousands of dollars on that basis.

EAST WING OF STADIUM ERECTED

The football fans naturally were eager to have the east wing of the stadium built, and feeling strong enough financially to undertake it the board obtained bids covering its construction, and, February 15, 1924, again awarded the contract to Mr. W. B. Stingley. The structure was essentially a duplicate of the west wing, and the contractual conditions were the same for the east wing as for the west, except that the base cost was to be \$50,000 instead of \$45,000, and Mr. Stingley's base compensation \$5,000 instead of \$4,500.

Work on the east wing of the stadium began March 13, and was prosecuted with such vigor that the job was accepted by the board September 18, 1924, subject to the completion of certain minor points to the satisfaction of the engineers. At that time the stadium corporation was in debt more than \$55,000, and this was reduced very slowly. The athletic council paid \$10,000 of this out of receipts from admissions to games.

LATER IMPROVEMENTS

Major improvements in the stadium were made later as financial conditions permitted. The unsightliness of the under view of the seating decks of the stadium, and the amplitude of space under them which was adaptable to use for many purposes were constant incentives to the erection of the enclosing back walls.

The erection of the enclosing wall for the east section of the stadium was provided for in a contract with Mr. Mont J. Green awarded November 7, 1927, by the stadium board. The principal

sum involved was \$36,800, upon which some variations were provided for. The winter weather was favorable so that the work was carried on so much of the time that it was practically finished by May 1, 1928.

A range for target rifle practice for the use of the military department has been located in the north end of the enclosed space.

A small structure for the use of reporters was built on the east stadium in 1924, but it proved to be inadequate and was removed in 1928, when a two-story wooden structure was erected on the back part of the seating deck of the west stadium. This affords a commodious box for the newspapermen and a group of guests. It also includes a booth for broadcasting. A series of boxes for guests of the president or the athletic council was provided below the press-box. In 1937 a small structure for the convenience of photographers was built on top the press-box.

In 1933 the directors through a committee attempted to obtain an allotment of funds by the Public Works Administration for the erection of a field house at the south end of the athletic field as a connecting unit for the two wings of the stadium, instead of the curved structure originally planned. Plans for such a field house had been prepared in considerable detail, and were submitted to the proper officers, but the efforts of a committee of the board met with no success.

Early in 1934 it seemed possible that, by the assistance of the Works Progress Administration, the College might be enabled to build the back wall of the west wing of the stadium. The directors voted that the K. S. A. C. Memorial Stadium Corporation would have no objection to this. It was not until May 7, 1936, that the project had developed so that Dean Seaton could submit plans perfected by him and the representatives of the Works Progress Administration, whereby the Stadium Corporation might apply for a grant of funds for that purpose. The total cost was estimated at \$35,935, of which the Stadium Corporation's obligation would be about \$8,250. The directors authorized proceeding on that basis, and though changes became necessary the work was finally completed in a satisfactory manner by June, 1938. The contribution of the Stadium Corporation was \$9,988.22, of which \$7,500 was donated by the athletic council.

In the summer and fall of 1938 the athletic council built a series of commodious rooms under the seating deck of the east wing of the stadium providing fine facilities for athletic teams in respect to locker space, shower baths, toilet rooms, medical rooms, store-rooms for equipment, and offices for coaches. Mr. Mont J. Green had the contract for this work which cost about \$30,000.

VAN ZILE HALL

The question of dormitories at the College was one that had been before the boards in control for many years. In 1910 a committee of the Board of Regents was appointed to investigate fully the project of dormitories for women, and an item of \$60,000 was included in the budget submitted to the legislature of 1913. The Board of Administration which came into control in 1913 investigated the proposal, and in its biennial report 1912-1914 supported the view that the State should adopt a policy of providing dormitories for part of the young men and young women attending the State educational institutions. In the next biennial report the board declared that the need of provision for housing the young women in halls of residence was very pressing. Methods by which they might be provided were discussed in considerable detail. The need was again presented in the biennial report for 1916-1918.

KANSAS WOMEN WORK FOR DORMITORIES

For some time prominent women of the State had felt it to be important to have residence halls for the women students at the State educational institutions. In January, 1916, the Kansas Council of Women appointed a committee, with Mrs. C. A. Kimball of Manhattan as chairman, to make plans for a legislative campaign to attain this objective. This council is composed of the presidents and past presidents of all the State-wide organizations of women. At that time these organizations were 18 in number, and said to represent 120,000 women.

The committee conducted an active campaign, and a bill was introduced in both houses of the legislature of 1917. This bill provided for financing the project by an issue of bonds, but, though it received strong support from some of the legislators it failed to become a law.

The Kansas Council of Women renewed its efforts in 1918 and 1919 with Dr. Alberta Corbin, adviser of women in the University of Kansas, as chairman of the committee, and with the counsel of the governor, State Board of Administration, and heads of the state schools, but again met failure.

For the campaign of 1921, with Doctor Corbin continuing as chairman, and the addition to the committee of the deans of women of all the State schools, an elaborate State-wide organization was made, and in this Dean Van Zile had a principal part in correspondence and in speaking. A bill was introduced in the legislature which was designed to appropriate \$1,000,000 with which to build a dormitory at each of the institutions, the money to be prorated to the several institutions in accordance with the number of women

students at each. The bill was modified and passed but appropriated only \$500,000.

In part the act provided that: "Said buildings shall be constructed on land owned by the state, and the cost of such building or buildings at each location shall not exceed the following sums: At Lawrence, \$300,000, at Manhattan, \$225,000, at Emporia, \$187,500, at Pittsburg, \$187,500, at Hays, \$100,000." The sum of \$250,000 was appropriated for the year ending June 30, 1922, and the same for the year ending June 30, 1923.

The total of these maximum costs prescribed is \$1,000,000, but only half that sum was appropriated. Perhaps the next legislature was expected to provide the other half. The five institutions proceeded to have plans and specifications made for buildings that it was thought would meet their respective needs, and the board of administration got bids upon them. It appeared that the money available was insufficient.

At this point President Jardine and Dean Van Zile offered to waive the rights of this college in order that the other institutions might have their dormitories as planned, and to trust to the legislature of 1923 for an appropriation to meet the needs of the Kansas State Agricultural College. This suggestion was followed, and the fund was allocated, \$176,000 to the University of Kansas, \$120,000 each to the normal schools at Emporia and Pittsburg, and \$84,000 to the Normal School at Hays.

Dormitories were constructed as planned at the other institutions, and Dean Mary P. Van Zile was made chairman of a new committee of the Kansas Council of Women to further the plan to obtain an appropriation to provide one for this College. A bill was introduced in 1923 appropriating \$175,000, which passed the senate but was killed in the house.

SUCCESS ATTAINED

The Kansas Council of Women reiterated its resolution that a dormitory should be provided at this College before its efforts in this field would be considered complete, and its work in 1924 and 1925 was rewarded by success. By an act approved March 13, 1925, \$100,000 was appropriated for the year ending June 30, 1926, and \$100,000 more for the year ending June 30, 1927. This was "for the purpose of constructing, equipping, and furnishing a dormitory for women students attending the Kansas State Agricultural College." Of this appropriation \$175,000 was used for the building and \$25,000 for equipment and furnishings.

With these funds the building, named Van Zile Hall in honor of Dean Van Zile in April, 1925, was erected and made ready for

occupancy in September, 1926. It was placed in the northeast corner of the campus, and to make ready for it, a number of wooden buildings used by the departments of animal husbandry and chemistry were removed. The landscape work around and in front of the building has much beautified that part of the grounds.

The dormitory affords rooms for 130 young women, who live



VAN ZILE HALL

This residence hall for women was occupied in 1926. In 1925 it was named in honor of Mary Pierce Van Zile, professor of domestic science from 1908 to 1918, dean of the Division of Home Economics 1912 to 1918, and dean of women from 1908 to the present (1939).

under almost ideal conditions. Self-government is fostered, and the facilities for wholesome home-like life include recreational opportunities consistent with effective work as students. Since 1933 plans have been in operation through which young women are enabled to pay a considerable fraction of the dormitory charges by assisting in the preparation and serving of the meals, and the general housekeeping. The satisfactory character of the student life of this residence hall is attested by the fact that the demand for rooms far exceeds the supply.

Dean Van Zile in 1924 regarded a dormitory as needed, "(a) To set standards of conduct for all students; (b) to create a standard of living at moderate cost; and (c) to aid in creating a finer spirit of democracy." Van Zile Hall has attained these objectives to an eminent degree.

The law provides that all money collected at the dormitory shall be paid monthly into the State treasury and placed in a fund

designated as the dormitory operating fund. All expenses of maintenance, repair, and operation are paid from this fund on warrants drawn on the State treasurer. In setting the charges to be paid by occupants of Van Zile Hall, the purpose has been to keep them as low as is consistent with the wholesome standards set, and not to create a large surplus which would be subject to diversion to other uses. In 1929, \$12,000 of this surplus was appropriated by the legislature for "campus roads, walks, and drives." Much of this was expended near the dormitory, including the construction of the stone arch bridge over the watercourse to the southwest.

THE FACULTY MEETING

Meetings of the faculty played a very important part throughout a considerable fraction of the history of the institution. The possibility of being "called before the faculty" was a perennial threat to students of mischievous dispositions. The general management of the local affairs of the institution was discussed and settled by the faculty.

There are no written records of the acts of the faculty preceding 1866, but from the existing early records which we have, it appears that the faculty met weekly, and as there were only a few members and comparatively few students, it was the practice to go over the entire list of students and make any comments which conditions called for. Record was made of the more important information brought out. Frequently the work was covered by a brief statement, such as "Faculty met and looked over the list of students." The total record entered for October 9, 1871, was "The list." For many years the bulk of the business transacted in the faculty meetings was concerned with students, individually or by groups.

While the relations of students to success in their studies were considered carefully, and especially at meetings immediately following examinations, one is impressed in reading the minutes with the attention given to college discipline. From the first, emphasis has been placed upon continuous and regular attendance, and absence from College and habitual tardiness by students were subjects for consideration and discussion by the entire faculty. The early catalogues contain more than a dozen rules concerning conduct of students. While these were omitted in the "Handbook," issued in 1874, they were replaced in spirit by brief statements which, with more or less modification, are found in later catalogues.

The curiosity of the reader of these minutes is aroused without subsequent satisfaction by the general character of the entries. Thus, one young man was called before the faculty on account of

"disobedience and impudence;" another on the charge of "disorderly conduct at the boardinghouse." In many cases, however, the nature of the offense is indicated, and in most cases the misconduct was rather trivial. Two young men were "charged with absence from chapel and tardiness to their classes. It was voted that they be called to appear at our next faculty meeting to answer to those charges." One, however, gets the general impression that students in the earlier days were more disposed to disorder than are those of the present time. Members of the faculty were appointed to preserve order. Along in the 80's the records show that students were punished for depredations incident to the celebration of Hallowe'en. For some years these were a great annoyance to College officers and to residents of Manhattan. Occasionally, students were questioned and, after conviction, expelled for stealing.

The scholarship of individual students received careful attention by the faculty, as shown by action upon requests for modifications of the regular assignments. Students were prevented from taking on more work than, in the judgment of the faculty, they could care for properly. Students failing in their work were required, in some cases, to drop a study, the main point of interest in this connection being that this type of duty was then handled by the entire faculty in the faculty meeting.

For two years, 1875-76 and 1876-77, faculty meetings were almost discontinued. At a meeting August 27, 1877, the faculty voted to meet weekly, and under the administration of President Fairchild weekly meetings were continued from 1879 to 1897. It was under his administration that the function of faculty meetings reached its highest development. The increase in the amount of business to be done led gradually to the establishment of standing committees, and items were referred to the appropriate one. However, these committees as a rule reported back to the faculty, with recommendations.

As a unifying instrumentality, the weekly meetings of the College faculty as conducted by President Fairchild exemplified complete democratic government, and attained the greatest administrative value. The group was small enough to provide for general participation in discussions and varied enough to insure diversity in points of view. The president encouraged full consideration of any question with no advance expression of his own opinion. In case of a tie vote he voted with the negative, as he believed that anything adopted should represent strongly positive conviction.

The faculty considered and acted upon every question concerning students individually and collectively: any irregularity of assignment whether in weight or content; any action to be taken in

case of failure in college work; requests for excuse from College, or for readmission; misconduct of every kind from unexcused absences up; and requests for permission to hold social affairs or for approval of new organizations. In the work of the College as an educational institution, discussion was free concerning changes in the curriculum and in courses offered, rules concerning examinations and grading, and making up subjects by outside study. Lists of books to be purchased for the library, and of periodicals for subscription, were acted upon.

Approval of localities for assistance in farmers' institutes, assignments of speakers to attend, and reports from them concerning the institutes attended were part of the routine.

Such detailed attention to College matters by the whole faculty was possible only while the College attendance was relatively small, and its general activities rather limited. As numbers increased and activities became more diversified, committees were created and utilized, but in most instances their conclusions were reported to the faculty for action, and frequently were amended before approval.

To some, the detailed consideration of so many and such diverse subjects was irksome, and it often seemed that the time of the faculty members was taken in considering matters of small consequence, but the general educational advantage of these meetings cannot be overestimated. The thorough discussion in the presence of the entire faculty of all the matters coming up in a growing institution requiring modifications of procedure and taking cognizance of new situations was an education in College administration to those who took it seriously, and created a solidarity in the faculty which can never be attained or maintained in an institution where thousands of matters are settled by individual deans or by committees which never report to the faculty.

Soon after the inauguration of President Will, the faculty contained a large proportion of new members, some of whom were not accustomed to the detailed work of the faculty and did not wish to participate in it, and before long it was voted that meetings be held once in two weeks. This change in itself made it necessary to remove from consideration of the faculty, matters concerning students which could not be postponed for ten or fifteen days. Thus, action by certain committees became the rule and final. In other cases, the president took action. Faculty meetings under President Nichols as a rule were held weekly, but with the inauguration of President Waters meetings of the faculty became less and less frequent. Cases upon which formerly the faculty would have acted were handled by the deans, either individually or as a Council. At the present time (1939) the faculty meets only a few times in the

year. The formal recommendation of students for graduation is still, nominally, in the hands of the faculty, although, practically, the recommendations of the deans are final. Approval of courses to be offered and the requirements of the several curricula, as printed in the catalogue, and of other catalogue material, is still given by the faculty. Occasionally special meetings of the general faculty are called for important purposes. Most of the work formerly done by the general faculty is now done through the faculties of the several divisions, committees, or deans. Action in respect to a few types of cases is taken by the president.

THE COUNCIL OF DEANS

During the administration of President Nichols the enrollment increased rapidly, and the Board of Regents after many months of preliminary consideration and discussion appointed a committee to make recommendations in respect to organizing the College into deanships. July 30, 1908, the committee submitted a report which was adopted and read as follows:

Whereas, The growth of the Faculty and student body of the Kansas State Agricultural College has made necessary a subdivision of the administrative duties to the end that the best interests of related departments and studies be furthered and for the cultivation of more intimate relations between the members of the Faculty, the administrative authority, and the student body.

Therefore, Your committee recommends that as a means to such ends, a Council of Deans be, and hereby is, instituted.

The members of said council to be the President of the College, who shall be chairman of the Council; a Dean of Science, who shall be the assistant to the President; a Dean of Agriculture, who shall also be the Director of the Experiment Station; a Dean of Mechanic Arts; a Dean of Women.

The members of the said Council of Deans shall be appointed by the President (with the exception of Director of Experiment Station who shall be Dean *ex officio*) with the consent and approval of the Board of Regents, and hold such office during the pleasure of the President, exercising such authority and performing such duties as the President may direct.

The several members of the Faculty associated with the Deans in accordance with the attached list shall meet as may be deemed necessary by the respective Deans under the powers and authority vested in them by the President.

The list referred to shows the departments associated with the Dean of Agriculture to be agronomy, animal husbandry, bacteriology, botany, chemistry, dairy husbandry, entomology, horticulture, poultry husbandry, and veterinary medicine; that is, the departments and only those which were connected with the Agricultural Experiment Station. With the dean of mechanic arts were associated the departments of architecture and drawing, civil engineering, electrical engineering, mechanical engineering, and printing. With the dean of science were the departments of economics, English, history and civics, languages, mathematics, military science, music, philosophy, and physics, and the preparatory department. The departments associated with the dean of women were domestic art, domestic science, and physical training. At that time only the young women were given physical training.

At the time that the Board took this action the directorship of the Agricultural Experiment Station was vacant, and Vice Director Willard was acting as director. This made him also acting dean of agriculture. This circumstance affected the nominations for deanships submitted by President Nichols, which were as follows: Dean of mechanic arts, Prof. E. B. McCormick; dean of science, Prof. C. M. Brink; and dean of women, Prof. Mary P. Van Zile. Mrs. Van Zile had been elected to the faculty the day before. These nominations were confirmed by the Board.

The position of director of the Agricultural Experiment Station was filled in December, 1908, by the election of Ed. H. Webster, who by that election also became dean of agriculture.

President Nichols used the Council of Deans as a body to act upon the failures and low grades of students, instead of submitting them to the faculty, but gave it practically no other duties, and assigned none to individual deans as such.

THE COUNCIL RECONSTITUTED

This organization of deanships was not altogether satisfactory, as the so-called dean of science had only one science department associated with him, and the other science departments were placed with the dean of agriculture because of their connection with the Agricultural Experiment Station. Regent Blackburn took the situation under consideration and proposed amending the plan concerning the Council of Deans to read as follows:

The members of said Council of Deans shall be the president of the College; dean of the College, who shall be assistant to the president; dean of science; dean of agriculture, who shall also be director of the experiment station; dean of mechanic arts; dean of women. Also the several mem-

bers of the faculty associated with the deans in accordance with the attached list shall meet as may be deemed necessary by the respective deans under the powers and authority vested in them by the president.

In designating departments to be associated with the respective deans the principle used was that of including all which were directly concerned with the field of activity represented by the dean. This resulted in associating a department with more than one dean in several cases. With the dean of agriculture were associated the departments in the Experiment Station—agronomy, animal husbandry, bacteriology, botany, chemistry, dairy husbandry, entomology, horticulture, veterinary science—and also physics. With the dean of the college were associated the general cultural departments—architecture and drawing, economics, English, German, history and civics, mathematics, military science, music, philosophy, and physical training. With the dean of science were the departments of bacteriology, botany, chemistry, entomology, mathematics, and physics. To the dean of mechanic arts were allotted the departments of architecture and drawing, chemistry, civil engineering, electrical engineering, mathematics, mechanical engineering, physics, and printing. Associated with the dean of women were the departments of architecture and drawing, bacteriology, botany, chemistry, domestic art, domestic science, entomology, physical training, and physics.

This report was recommended April 14, 1909, and adopted the 14th of the next June. June 18, Prof. J. T. Willard was approved by the Board as dean of science. Dean Brink became dean of the college, retaining also the title of assistant to the president.

DUTIES ASSIGNED TO THE DEANS

President Nichols was to close his connection with the institution June 30, 1909, and the deans, realizing that the incoming president, Henry Jackson Waters, was accustomed to administration through deans, and would be greatly dependent upon those of this College, asked President Nichols to exercise the authority vested in him by the Board to designate the duties of the deans. A few of the deans conferred and prepared a conservative statement of duties for which it seemed that deans might properly be responsible. This statement was approved by President Nichols. It was also submitted to President-Elect Waters and approved by him. It reads as follows:

The Council of Deans provides a membership representing (1) the College as a whole—the President of the

College; (2) the general educational and cultural work—the Dean of the College; (3) the education in the sciences—the Dean of Science; (4) the specific training in agriculture—the Dean of Agriculture; (5) the specific training in mechanic arts—the Dean of Mechanic Arts; (6) the interests in which women are more especially concerned—the Dean of Women.

Under the above authorization the Council of Deans will consider and act upon such matters as may be brought before it by the President, and the following duties are at this time designated as coming under its control, the same to be handled by such detailed methods as may be determined upon in the several cases:

1. To be in general charge of the assignment of students, and of all questions touching the relation of students to the courses of study, including approval of schedules, passing upon variations from specified courses and upon electives proposed to be offered as available to students in meeting the requirements of the several courses.
2. To take charge of the graduate work.
3. To consider and approve textbooks.
4. To authorize the purchases for the library.
5. To consider, and as far as possible to act upon, questions touching buildings and grounds, general repairs, and distribution of water, heat, power, light, and gas.
6. To provide through the *Industrialist* for proper presentation of the several great fields of effort and activity of the College.

Matters to be presented to the Council of Deans by the head of any department shall go through the hands of the Dean who represents that phase of college activity which includes the specific matter in question. Such presentation may be in writing and a duplicate furnished the President.

When President Waters assumed his position, he at once began to assign additional duties to the deans. Records of meetings with the deans were not made, and no minutes exist of the extension of powers conferred upon the deans by President Waters. There was, however, a gradual development in the assignment of management of local procedure to those officers.

At that time the differentiation in curricula did not begin until the sophomore year. A freshman year common to all was in force. A preparatory department was also maintained in which less advanced students could obtain secondary instruction. In assuming

charge of the assignment of students, it was arranged that Doctor Brink, dean of the college and assistant to the president, should have charge of the assignment of all preparatory and freshman students. The other deans divided the students, beginning with the sophomore year, among themselves in accordance with the curricula chosen by the students, respectively. Arrangements were made for appropriate blanks for use under the new plan for assigning, and from time to time additional blanks were proposed and adopted. All of these were of a uniform size, 3 x 5 inches. This made it possible to file together matter of every type concerning an individual student.

DIVISIONS OF THE CATALOGUE

In the College catalogue as arranged by President Nichols all the curricula were presented successively, followed by outlines of instruction in the several departments, these being arranged alphabetically. It was the wish of President Waters that the catalogue be arranged in parts, with the curricula relating to a given field of instruction and descriptions of the work of departments in that field presented together. In preparing copy for the printer an appropriate heading was needed for these several parts, and upon the suggestion of Dean Webster they were called Divisions. There thus appeared the Division of Agriculture, the Division of Mechanic Arts, the Division of Home Economics, and the Division of General Science. President Waters preferred to designate the last as Division of General Science rather than Division of Science. This corresponded to the name of the curriculum, that of general science, which was the only one at that time for which the dean of science was responsible. Names of deans were not published in connection with the titles to these divisions of the catalogue.

As a matter of fact, the institution had not been organized in Divisions, and by the second plan of organizing the relations of departments to deans an individual department might be connected with more than one deanship. Meetings were not called by the deans very frequently, but when revisions of curricula were under consideration, it was important to have basic subjects represented as well as those of a technical nature.

In the revision of curricula under the direction of President Waters in 1910 the principle of having the freshman year the same for all students, differentiation beginning only with the sophomore year, was abandoned. This appeared in the catalogue for 1909-10, and Dean Brink was thereby automatically relieved of responsibility for freshman students. In the fall of 1910 the subfreshman work was organized in a two-year curriculum and placed in charge of

Assistant Professor W. H. Andrews, who also continued his work to a certain extent in the department of mathematics. This reorganization removed the preparatory students from Dean Brink's charge. The office of dean of the College expired with the death of Dean Brink, June 29, 1916.

THE COLLEGE ORGANIZED IN DIVISIONS

January 29, 1912, the Board of Regents ordered that the Divisions of the College be as follows:

The Division of Agriculture, with E. H. Webster, Dean.

The Division of General Science, with J. T. Willard, Dean.

The Division of Mechanic Arts, with E. B. McCormick, Dean.

The Division of Home Economics, with Mrs. Mary Van Zile, Dean.

The College, with C. M. Brink, Dean ***.

The assignment of departments to Divisions was left in the hands of the president. Since that time the arrangement of departmental descriptions in the catalogue has conformed to the assignment of departments to deans.

ADDITIONAL MEMBERS OF THE COUNCIL OF DEANS

October 29, 1912, the Board of Regents voted that "There is hereby created the Division of College Extension, which shall be coordinate with the other Divisions of the College. The Division of College Extension shall be administered by a dean coordinate in rank with the other deans of the College. The dean of the Division of College Extension shall have the same authority over the movements, activities, and work of the officers and employees of this Division as the deans of other Divisions of the College have over the officers and employees of their Divisions." Superintendent John H. Miller thus became a member of the Council of Deans.

On January 25, 1918, the Board of Regents on recommendation of Acting President J. T. Willard changed the title of the "director of the summer session" to be "dean of the summer session," thus making Prof. E. L. Holton a member of the Council of Deans. Acting President Willard also took the initial steps in dividing the work of the dean of the Division of Home Economics by making the deanship of women a separate position. This matter was taken up by President Jardine, and on his recommendation the Board of Regents voted that "in view of the growing needs of the institution, with a steadily increasing enrollment of women, a posi

tion to be known as dean of women is created to be entirely separate from the position of dean of the Division of Home Economics now existing, the same to be effective July 1, 1918." Dean Mary P. Van Zile was appointed to this position, and Dr. Helen B. Thompson was elected dean of the Division of Home Economics.

March 1, 1919, on recommendation of President Jardine, who recognized the need of developing constructive plans for veterinary medicine, Dr. R. R. Dykstra was advanced to be professor of veterinary medicine in the place of Dr. F. S. Schoenleber, who had resigned two years previously. The same spring this department was separated from the Division of Agriculture and given the status of a Division, with Doctor Dykstra as its dean.

Dean Willard was relieved of his deanship, July 1, 1930, and was succeeded by Dr. Rodney W. Babcock as dean. However, by executive action, Vice-President Willard remained a member of the Council of Deans, and also continued as such after release from the vice-presidency and appointment to be college historian, January 1, 1936.

In the course of the years the work in connection with graduate students assumed considerable volume and became of great importance. This had been handled by Dr. J. E. Ackert as chairman of the graduate council, but effective November 1, 1931, a Division of Graduate Study in the College was established by the Board, and Doctor Ackert was made dean of that Division.

September 10, 1936, the Council of Deans voted to suggest to President Farrell that Vice-President Samuel A. Nock be made a member of the Council of Deans, effective immediately, and President Farrell acted affirmatively upon that suggestion. As vice-president, Doctor Nock is in general charge of the correspondence with prospective students, and the office of registrar is closely affiliated with his. The induction and registration of students, and a large number of administrative details in connection with student records, are thus to a considerable degree brought under one management.

As thus constituted and developed, the Council of Deans in 1939 consisted of twelve members, and included all College officers charged with important executive duties.

FUNCTIONS OF THE COUNCIL

In the course of its existence, the Council of Deans has gradually become, under the president, the chief governing agency in the management of the local affairs of the College. Matters which 50 years ago could be readily considered by the faculty as a whole, scarcely greater in number than the Council of Deans, it is now

practically impossible to handle in that way. The Council of Deans represents all interests of the institution, and the individual deans by frequent conferences with subordinate members of the faculty are able to acquaint themselves with institutional opinion. Government by a rather small competent board of this kind is certainly preferable to that exercised by a president only. It is physically impossible for a president to become acquainted with the multitude of relations among departments, and activities and individuals of the whole College. The Council of Deans is probably a fair compromise between a presidential autocracy and faculty democracy. The Council meets any time at the call of the president, at intervals of approximately one month, and is a deliberative body the conclusions of which are observed by the president. In certain cases the president calls upon the deans for advice on matters in which responsibility for any action to be taken resides with him. A copy of the minutes of the Council of Deans is furnished to each department head.

It is evident that, while under the present administration the Council of Deans constitutes a benevolent bureaucracy, under the authority conferred upon him when the Council was established it is possible for the president to assume autocratic control at any time.

GRADUATE WORK AND ADVANCED DEGREES

In the early years of the College there was little demand for graduate work and practically no provision for it. Advanced degrees given were purely honorary or based on the general intellectual growth of the graduate, or on the service rendered by him. The third annual catalogue, 1866-67, states that "On graduates of three years' standing, who have engaged during the time in professional or literary and scientific studies, will be conferred the master's degree." The first class was graduated in 1867, and pursuant to the general provision, the degree of master of arts was conferred upon each of the five members of the class in 1871.

In the catalogue for the year 1868-69 Martha A. White is listed as a "resident graduate," and thus appears to be the first graduate student in the institution. In the same classification in the catalogue for 1871-72, appear the names of Albert Todd and S. Wendell Williston, who had been graduated in March, 1872, and apparently continued study to the end of the year.

The catalogues issued by President Anderson contain no references to graduate work and no announcements concerning degrees of any kind. The lists of students were printed in alphabetical order

without classification excepting that a few special students in chemistry were named separately. Among these was Mr. Williston. He received the degree master of arts in 1875.

For more than twenty years there were no definite specifications in respect to qualifying for an advanced degree. Applications were made by the graduates interested or by friends in their behalf. These were considered by committees of the faculty and the faculty as a whole, and some were recommended to the Board of Regents for degrees, while others were postponed or denied outright.

The first catalogue issued by President Fairchild in respect to lists of students covered three years, 1877-80, and named Corvin J. Reed and Clarence E. Wood, both of the class of 1879, as resident graduates in 1879-80. This catalogue announced that "The degree of master of science is conferred upon graduates of three years' standing who give evidence of advancement in the application of science to the arts of practical life and present an acceptable thesis upon some topic assigned by the faculty." In accordance with this provision, master's degrees were conferred upon Albert Todd, '72; Harry A. Brous, '74; Alice (Stewart) Points, '75; George H. Failyer, '77; John S. Griffing, '77; William Ulrich, '77; Albert N. Godfrey, '78; Warren Knaus, '82; Phoebe (Haines) McKeen, '83; Jacob Lund, '83; Julius T. Willard, '83; and Henry M. Cottrell, '84. All of these received the degree master of science excepting Messrs. Todd and Brous and Mrs. Points, who received the master of arts degree. The master of arts degree has not been conferred since, excepting as an honorary degree.

In 1883 the Board of Regents voted "that no degrees be conferred except upon the recommendation of at least two thirds of the members of the faculty."

SYSTEMATIZING STUDY FOR THE MASTER'S DEGREE

In 1886 the faculty placed the conferring of the master's degree upon a much more definite basis. Two types of persons were represented in the faculty, those who were disposed to emphasize progress in the industrial arts, and those who attached as much or greater importance to progress in sciences underlying or related to agriculture and the industries. The conditions adopted reflected the ideas of both groups as shown by the following quotation from the catalogue of 1885-86:

The degree of master of science is conferred in course upon graduates who comply with the following conditions:

1. Each candidate shall furnish evidence satisfactory to

the faculty of proficiency in at least one of each of the groups of arts and sciences here named:

Arts:

Agriculture
Horticulture
Engineering
Architecture and Designing
Domestic Economy

Sciences:

Botany
Chemistry
Zoology
Entomology
Physics

2. Each candidate shall present for consideration by the faculty a satisfactory thesis, involving original researches in line with one or the other of the courses pursued as above, and shall deposit a perfect copy in the College Library.

3. Application to the faculty for sanction of the lines of study and research selected should be made as early as the first day of November, and the subject of the thesis must be settled upon as soon as the first day of January preceding the Commencement at which the degree is expected.

4. Candidates must be from graduates of three or more years' standing, unless a post-graduate course of one year or more has been pursued at this College, in which case the second degree may be conferred two years after graduation.

In 1887 an application for a master's degree was received from a graduate of another college, and the faculty voted that "the degree of master of science may be conferred upon the graduates of other colleges of like grade and having similar objects with our own, on the following conditions ***." The conditions were essentially the same as prescribed for Kansas State alumni.

The general plan of these provisions was continued in force until 1900. Part of the credit throughout this period was obtained by systematic study in organized classes, but much of it, especially in the earlier years, was obtained through successful private study with the guidance and advice of members of the faculty but without formal class or laboratory instruction. In 1893 it was specified that the work in a resident course should "be the equivalent of that necessary to pursue three full studies, the time in the aggregate to be divided approximately into three equivalents, two to the major and one to the minor study." In 1895 an added provision was "if higher mathematics or political economy be taken as a third minor study, due credit will be given in estimating proficiency." This reflects growth in the interest in engineering subjects, and the political interest at that time in extending the study of economics.

In 1897 the statement of requirements was generalized. While still naming the "arts" the statement concerning the "sciences" was

replaced by "and in a science or a group of sciences related thereto." It was provided that "either a science or an art may constitute the student's major study; in either case his studies are expected to bear upon the distinctive work of the institution." In 1900 a perfectly generalized statement was adopted as follows: "Each candidate is required to take a definite course approved by the faculty, and his studies are expected to bear upon the distinctive work of the institution." The rules contain no reference to three full studies, or a major and minors, and approved arts and sciences were no longer named.

In 1902 a complete revision was made of the conditions and procedure involved in obtaining the master's degree. These were presented in the catalogue for 1901-02 and with only minor changes in later catalogues, including that for 1910-11. The principal provisions adopted at that time were as follows:

The degree of master of science will be conferred in course upon graduates of the College who have received eighteen credits in an approved graduate course, each credit being equivalent to a full study pursued for three months.

Courses will be approved which are in line with any one of the regular undergraduate courses, and include at least six credits in the biological or the physical sciences, or mathematics, and at least six credits in technical or industrial branches.

The principal line of study shall be designated as the major, and another line as the minor study. As nearly as may be, one-third of the time is to be given to the minor and two-thirds to the major study, including in the latter such scientific, mathematical, or technical branches as contribute directly to it. The minor study must fill a logical place in the scheme, so that the work as a whole may possess unity.

*** Each candidate shall present to the committee on graduate courses, typewritten and in duplicate, a satisfactory thesis involving original work along the line of his major subject. Thereupon a special examining committee of three shall be appointed from the faculty, of whom one member shall represent the major subject and another the minor, who shall examine the candidate orally on the subject-matter of his thesis, and report the result of such examination to the faculty. Upon receipt of the report of this committee, the faculty will take action concerning the recommendation of the candidate for the degree.

Many details concerning procedure were included in the statement. It should be noted that the provisions were liberal to the extent that while one third was to be applied in the field of sciences and one third in that of arts, the other third could be in any field desired, so long as unity of the whole was not traversed. Provision was made in 1904 that "three minor credits may be a modern language." This was equivalent to one third of the total work for one year.

RAISING THE STANDARDS

In 1912 a special committee of the faculty gave prolonged study to the question of the requirements for the master's degree, and while these were made distinctly stronger, their formal statement was reduced in volume. They appear in the catalogue for 1911-12. The chief provisions were as follows:

For graduates of this institution the work for the degree of master of science consists of ninety-six credit units. The work of applicants who are graduates of other institutions is evaluated by a committee consisting of the chairman of the committee on advanced credit and of the dean of the division and the head of the department in which the major is to be taken, and the student is given proper standing.

Forty-eight of the required ninety-six credit units are designated as supplementary minors, and are to be derived from studies that are intended to strengthen the student's general preparation; the remaining forty-eight are taken from studies of a special nature. Of the forty-eight credit units derived from special training, thirty-two are given to the major subject and sixteen to the minors. The nature and distribution of the major and minors are determined in each individual case by a committee, consisting of the dean of the division and the head of the department in which the major is taken.

Credit units due an honor student are applied on supplementary minors. In case a student nearing graduation has time, he may be permitted, by arrangement with the dean of the division and the head of the department in which he expects to do the major work, to spend his extra time on studies which will count toward the degree of master of science.

A thesis consisting of a clear statement of the investigation of some worthy original problem is required. The candidate is subjected to a rigid oral examination, covering both the general and special fields of his preparation, including

his thesis, by a committee consisting of the dean of the division, the heads of the departments in which his major and regular minors have been taken, and the chairman of the standing committee on graduate study.

The full responsibility for the successful conduct of the graduate work is lodged in a representative standing committee of the faculty, consisting of five members selected by the president, and this committee has the right to pass on all courses offered, on all assignments taken out, and on the standing of all graduate students.

A credit unit was a term hour, equivalent to a study pursued in a class one hour per week, with the necessary additional preparation, for a term of twelve weeks. "Credit units due an honor student" referred to credits which under action of the faculty in 1910 were awarded to students achieving senior honors or both junior and senior honors. This action of the committee made it impossible for such credits to be applied against the requirement for "studies of a special nature;" that is, graduate work proper.

October 30, 1912, on recommendation of the faculty the Board of Regents voted that effective September, 1913, for the class of 1917, fifteen units of high school work should be required for admission. The provisions in respect to graduate work were revised to the extent of designating that they applied to the graduates up to and including those of 1916. In 1917 the material concerning graduate study was rewritten to conform to the fifteen units admission requirement and the adoption of the semester calendar instead of the three-term calendar. Some details were added in respect to the major and the minors. Definite provision was made for evaluating the thesis in respect to semester hours of credit. A total of thirty-two semester hours was required corresponding to the forty-eight term hours previously specified. Graduates of 1916 or earlier years were held for thirty-two additional hours of supplementary minors in studies of college grade that were intended to strengthen the student's general preparation. Credit on these might be obtained by study in residence, by correspondence, or at other approved institutions, and credits due the student on account of senior honors were applicable against these supplementary minors. In 1913 the faculty voted to require a reading knowledge of one foreign language. This was to be effective September, 1916.

THE GRADUATE COUNCIL

From 1909 to 1920 applications for graduate study were passed upon by the Council of Deans, and assignments issued in carrying out approved plans were in charge of the deans of the several Divi-

sions, respectively. In 1920 the administration of the graduate courses was vested in a graduate council. This body consisted of seven members selected from the different Divisions of the College as follows: agriculture, two; engineering, one; general science, two; home economics, one; and veterinary medicine, one. The members of the graduate council were appointed by the president, and its chairman was designated by him. A graduate faculty was also instituted, which consisted of all those who were recommended by the department heads and approved by the graduate council as qualified to give graduate instruction. The chairman of the graduate council was chairman of the graduate faculty.

Subject to the authority of the president and the Board of Administration and in accordance with any general regulations adopted by the graduate faculty, the graduate council determined matters of curriculum, admission to graduate study and to candidacy for an advanced degree, and other matters relating to the proper administration and development of graduate work in the College. The catalogue for 1919-20 gave in considerable detail the conditions of admission to graduate work, registration, and requirements for qualification to receive an advanced degree. In general the requirements were not modified greatly, but a modern language might be insisted upon at the discretion of the department in which the major work was done. A certain superiority of scholarship was also insisted upon, and a limitation was placed upon the amount of credit per semester which might be obtained. Details of procedure were announced.

The catalogue for 1919-20 records the existence of graduate assistantships in twelve different departments, and students desiring appointment to such assistantships could obtain application blanks from the chairman of the graduate council. Practically, appointments to these positions were upon recommendations of the heads of the several departments in which such assistants rendered service. They required half time of the student for laboratory or research assistance in the line of the student's major work, the other half of his time being given to his graduate study. A residence of two years was required, and no graduate assistant might receive more than eight semester hours of credit per semester.

Modifications in the requirements and procedure were made from year to year which will not be entered upon here. Graduate assistants were permitted to obtain as much as twelve semester hours of credit, including thesis, in a semester. A distinction, beginning in 1926, was made between graduate assistantships and graduate research assistantships. The latter assist in conducting the regular

research work of the institution, while the former are occupied chiefly with instruction in laboratory or class work.

May 20, 1921, the Board of Administration voted that "in order to encourage continuous graduate study towards a higher degree, it is ordered that a member of the faculty or other regular employee of the College who takes College work for credit be charged instead of the regular incidental fee an amount that is such a fraction of the incidental fee as the number of semester hours taken is of sixteen semester hours." Other fees were not affected by this concession on the incidental fee.

DIVISION OF GRADUATE STUDY ESTABLISHED

November 1, 1931, the Division of Graduate Study was established with Dr. James E. Ackert as dean. Doctor Ackert had been chairman of the graduate council from 1923, and under the divisional organization in the administration of graduate work has used the principles and many of the requirements adopted previously.

THE DEGREE DOCTOR OF PHILOSOPHY

The projects of the Agricultural Experiment Station afford opportunities for much original work of a high order in which graduate students frequently participate. Other research work is also constantly in progress in the College. A large number of officers of the staff had doctor's degrees, and the propriety of offering work leading to the degree of doctor of philosophy became a topic of discussion.

June 5, 1929, the Council of Deans voted to request the graduate council to make a study of the proposal to undertake to offer in a limited number of departments work leading to the doctorate. In the thirty-third biennial report, 1929-1930, President Farrell discussed the question at some length. He also recommended to the Board of Regents that authority be given to confer the degree doctor of philosophy under certain conditions, but October 21, 1931, the Board postponed the matter indefinitely. However, June 2, 1932, the following action was taken:

It was moved by Mr. Harris, seconded by Mr. Wilson, that the Kansas State College, Manhattan, be authorized to confer upon students completing the requirements therefor the degree of doctor of philosophy, and to offer in the departments of chemistry, milling industry, bacteriology, and entomology graduate work leading to that degree, this authorization to become effective September 1, 1932. Motion carried.

April 8, 1935, the Board modified the action so as to include, in addition to the departments named, the field of genetics in which several departments do research. Other departments will doubtless be added as library facilities, equipment, and personnel become adequate.

This expansion is in line with the view of President Farrell that the institution should be developed vertically, rather than horizontally, that is, through better work in a somewhat limited field rather than by enlarging the area of activity.

TWO BACHELOR'S DEGREES

It not infrequently occurs that a graduate from one curriculum of the College desires to fulfill the requirements of another, and to receive a second bachelor's degree. Some of the curricula do not greatly differ in their fixed subjects, and through suitable choice of electives one might easily qualify formally for two degrees. Rather indefinite handling of such cases led to an investigation by a committee of the Council of Deans of the practice of other institutions. As a result the Council recommended to the faculty that not less than 30 semester hours of additional work be demanded of any candidate for a second bachelor's degree, and this requirement was adopted by the faculty October 11, 1932.

GRADUATE WORK IN EDUCATION

February 22, 1935, the Board of Regents took action as follows in respect to graduate work in education:

Resolved by the State Board of Regents that after September 1, 1935, graduate training in education at the University of Kansas shall be unlimited; that, at Kansas State College, Manhattan, in its graduate training in education, major emphasis shall be placed upon rural and vocational education; graduate courses of the State Teachers College of Emporia, State Teachers College of Pittsburg, and Fort Hays Kansas State College, Hays, Kansas, shall be limited to subjects taught in the public schools but not to include home economics, agriculture, commerce, physical education, health, and fine arts, and not to extend at all beyond the master of science degree in education at these institutions.

This was a provision relating to the timeworn problem of duplication at the State educational institutions.

HONORARY DEGREES

The Board of Regents has conferred honorary degrees in a number of instances on the initiative of one of its members, or of

the faculty. The faculty recommended to the Regents that the degree of doctor of divinity be conferred upon Rev. Charles E. Reynolds, chaplain at Fort Riley and a member of the Board of Regents, and the degree was conferred in 1868. The next honorary degree was conferred in 1872 upon Prof. J. E. Platt, a member of the faculty without a degree, "in recognition of his faithful and successful service as a teacher and his high worth as a man." The degree given was that of master of arts. In 1873 the degree master of arts was conferred upon Prof. C. V. Riley, a celebrated authority in entomology at that time and who delivered a course of lectures at the College on entomology in September, 1872. He delivered a second series in November, 1876. In 1877 the honorary degree doctor of laws was conferred upon John Fraser, who had been chancellor of the University of Kansas.

A minute in the faculty records for June 5, 1882, reads:

President read a communication from the American Philological Society and the American Association for the Advancement of Science and others asking the college not to confer the degree of Ph. D. and of S. D. without an examination. On motion of Professor Ward the communication was referred to the Board of Regents with the approval of the faculty.

The position taken by the learned societies and the faculty has been adopted very generally in respect to the degree doctor of philosophy, but the degree doctor of science is awarded as an honorary degree by universities of the highest rank in this country and abroad.

In 1883, upon the unanimous recommendation of the faculty, the Board conferred the degree master of science upon Prof. John D. Walters. Professor Walters had not previously been awarded a degree, and this one was in recognition of his evident scholarship in mathematical and scientific lines.

In November, 1898, the Board voted "that the degree of master of science be conferred on Mr. Elam Bartholomew of Rooks County, Kansas, for special proficiency in botany," although he had no degree. This was on the initiative of the Board, but the distinguished work continued by Mr. Bartholomew amply justified it, and in 1927, on recommendation of the Council of Deans, the honorary degree doctor of science was conferred upon him.

In 1902 the degree master of science was conferred as an honor upon Mr. George F. Thompson. Mr. Thompson was nearly a graduate of the College, and an able superintendent of printing in it for several years. He had gone to the United States Department of

Agriculture and achieved pronounced success as an editor and bibliographer, and this degree was recommended by the faculty.

The degree master of arts was conferred as an honor upon Prof. Oscar E. Olin in 1897, Assistant Professor Alice Rupp in 1904, members of the faculty, and upon Regent Edward T. Fairchild in 1907. Mr. Fairchild had been an outstanding member of the Board and a successful educator for many years. He had recently been elected State superintendent of public instruction and was about to retire from the Board of Regents. These actions were independent of the faculty.

In 1908 the honorary degree doctor of arts was conferred upon Prof. J. D. Walters and that of doctor of science upon Prof. J. T. Willard. In 1909 the degree doctor of philosophy was conferred upon the retiring president, Ernest R. Nichols. These were given them in recognition of attainments and service in architecture, chemistry, and physics, respectively. These degrees were awarded by the Board on its own initiative.

President Waters was quite jealous of the prerogatives of the faculty, and when he and the Board of Regents were making plans for his formal inauguration, and it seemed suitable to confer honorary degrees upon those who were to be the principal speakers on that occasion, he called the faculty together and asked that the necessary recommendations be made. This was done without discussion, and on November 11, 1909, the degree doctor of laws was conferred upon Frank Strong, chancellor of the University of Kansas; Joseph H. Hill, president of the Kansas State Normal School; E. T. Fairchild, state superintendent of public instruction, Kansas; Walter Williams, dean of the school of journalism, University of Missouri; Walter Roscoe Stubbs, governor of the State of Kansas; Charles F. Scott, member of Congress; and F. D. Coburn, secretary of the Kansas State Board of Agriculture.

In 1920, on recommendation of the faculty, the degree doctor of laws was conferred upon Major Generals James G. Harbord, Eli A. Helmick, and Frank W. Coe. General Harbord was graduated from this College in 1886, and the other two were students for significant lengths of time. The degrees were awarded in recognition of the distinguished service rendered by each in the World War.

Since 1920 prominent men and women have been chosen from time to time to be honored by the degree doctor of laws or doctor of science. That this may be a real honor it is necessary that the number recognized be distinctly limited. That the honor is appreciated is shown by the extent to which the names of persons deemed worthy to receive it are submitted. That selection may be made

with deliberation and discrimination, a permanent committee to consider such suggestions was established in 1934.

PROFESSIONAL DEGREES IN ENGINEERING

Dean Potter, in 1915, advocated the conferring of professional degrees in engineering, and after prolonged discussion by a general committee, the faculty of the Division of Engineering, and the committee on graduate study, rules governing the granting of such degrees were adopted and were approved by the Board of Regents. A limited number in any one year were awarded such degrees until 1939, the practice being abandoned at that date.

The degree doctor of engineering was conferred upon Dean Andrey A. Potter in 1925, Dean Dexter S. Kimball in 1930, Prof. Ernest H. Freeman and Mr. George W. Wildin in 1935, and Mr. William L. Enfield in 1938.

DEVELOPMENT OF DEPARTMENTS

In the early days of the College the word department was used somewhat loosely with reference to a general field of instruction, rather than to a group of the faculty operating in a more or less definite area of instruction, investigation or service, and usually provided with appropriate apparatus or equipment. Members of the faculty then were said to "hold the chair" of natural science, English literature or mathematics, as the case might be. As the faculty was small, it was usually the case that a professor taught subjects not really closely related to that indicated by his chair. In some cases a man was designated as professor of a group of subjects which later was divided and distributed among two or more persons. The progress of knowledge has also occasioned the establishment of new departments.

President Denison and Prof. J. G. Schnebly were the only teachers of college subjects the first year. The former was designated as professor of ancient languages and mental and moral science, and the latter as professor of natural history and lecturer on agricultural chemistry. The second year, Prof. N. O. Preston appeared as professor of mathematics and English literature, Prof. J. E. Platt as professor of vocal music and principal of the preparatory department, and Dr. C. Hubschman as professor of instrumental music.

Professor Preston died in February, 1866. Prof. J. H. Lee was chosen to succeed him and had the title professor of Latin language and literature. Later this appeared as Latin and English literature. Before the death of Professor Preston, Prof. B. F. Mudge had been made professor of natural science and higher mathematics. Professor Platt's title was then professor of mathematics and vocal

music. In 1868 Prof. J. S. Hougham was professor of agricultural science. Gen. J. W. Davidson had the title professor of military science and tactics.

In 1871 Professor Hougham's title was professor of agricultural chemistry, mechanic arts and commercial science, and Major Fred E. Miller was professor of practical agriculture and superintendent of the farm. Miss Mary F. Hovey was professor of German and English literature. Recognition to agriculture was also exhibited in Professor Lee's title, which was made professor of agricultural classics. However, the next year it was given as professor of Latin and English literature.

In 1872 Dr. H. J. Detmers was professor of veterinary science and animal husbandry, and Prof. E. Gale, professor of horticulture and superintendent of the nursery. Miss Hovey had gone, and Miss Jennie Detmers was teacher of chemistry and German.

Within the period from 1873 to 1879 several new or modified titles appeared. Among them were botany and horticulture; botany and entomology; botany, entomology and geology; botany and practical horticulture; mathematics and English; English and history; and veterinary science.

The foregoing incomplete presentation of titles is designed to show the diversity of combinations and their apparent adaptation to persons rather than to recognition of fundamental subject-matter relations during the early years of the College. By 1879 the academic chairs were rather well established, as political economy, held by the president, mathematics and English, chemistry and physics, practical agriculture, botany and horticulture, elementary English and mathematics, and industrial drawing. In the industrial arts there were the mechanical, printing, telegraph, and sewing departments. Instrumental music was also recognized with a teacher. Attached to these departments but unrecognized in the titles were zoology, entomology, physiology, geology, mineralogy, meteorology, history, logic and practical law.

Changes in the areas for which the several departments were responsible and establishment of new departments have been made for several reasons, among them: (1) To enlarge the work in a given field by creating for it a separate status; (2) to recognize that the growth of knowledge has been such as to create a new field; (3) to divide a large complex department into two or more for easier and more effective administration; (4) to satisfy the personal urge in members of the faculty to have opportunities for individual responsibility and recognition; (5) to recognize a change in stress in respect to the several fields of activity in a department.

DIVISION OF AGRICULTURE

In the earlier decades of the College the limited resources, small number of students, simple equipment, and the undeveloped state of the sciences and industries related to agriculture made it not only necessary, but natural and efficient, for all agricultural work except horticulture to be in charge of one person, designated as the professor of agriculture. The practical point of view was indicated by the name farm department, which continued to be used in official reports to 1897. In the biennial report for 1897-1898 the name department of agriculture appeared, and the word agriculture had always been used in connection with catalogue descriptions of the subjects in which instruction was given.

Agronomy, Animal Husbandry, and Dairy Husbandry

As the number of subjects taught, the equipment and facilities, and the number of students handled increased, it was deemed desirable to divide the department of agriculture. Progress in this direction was not made in a regular fashion, but was determined to a considerable extent by the special qualifications or preferences of the personnel. The staff was affected by resignations which occasioned new alignments of courses in departments. Departmental names, therefore, were for some years rather confusing and inconsistent. Dairy husbandry was separated from agriculture in 1901, and animal husbandry in 1902, but the all-inclusive name, agriculture, was retained for the parent department until 1906, when it was changed to agronomy.

Prof. D. H. Otis was placed at the head of the department of dairy husbandry in 1901. In 1902 animal husbandry was separated from the agriculture department and was placed in charge of Professor Otis, Prof. E. H. Webster being made professor of dairying. In 1903, Professors Otis and Webster having resigned, the departments were combined in a department of dairy and animal husbandry under Prof. Oscar Erf. In 1905 this department was divided, Prof. R. J. Kinzer becoming head of the department of animal husbandry, and this division was permanent.

Horticulture

The importance of investigation and instruction in horticulture, including forestry, was recognized and stressed from the beginning of the College. Experimental plantings in this line of work were among the earliest practical enterprises. For many years responsibility for horticultural work was combined with that for other subjects, and the title of a department and of its head were determined by the combination of subjects that in the existing

circumstances seemed best. This was influenced by the individual preferences of individuals, as well as by limitations in financial resources.

The horticultural work for some years was combined with agriculture under Professor Hougham. Rev. Elbridge Gale operated a nursery on the land which is now the northeast quarter of the College campus and was a member of the Board of Regents for several years. He promoted the work of the College in horticulture, and in 1871 at the close of his service as a Regent he was made instructor in horticulture in the College. In 1871 Mr. Gale's farm was purchased to be part of the campus, and the operation of the nursery was continued by Mr. Gale for the institution. Thousands of trees were sold to Kansas citizens in that pioneer period.

Major Fred E. Miller had succeeded Professor Hougham as superintendent of the farm, and apparently there was some uncertainty in respect to the jurisdiction of the farm department and the horticulture department, as Professor Miller asked for a definite statement by the Board in respect to this matter. The Board voted that the horticulture department should include the care of the nursery, the vineyard, the orchard, and the experimental forest.

In May, 1876, the work in botany was consolidated with that in horticulture under Professor Gale, who continued in charge of this enlarged department for two years when he was succeeded by Mr. H. E. Van Deman. Professor E. A. Popenoe succeeded Professor Van Deman in 1879, and soon after the scope of the department was enlarged by including entomology, though this science was not named in Professor Popenoe's title. The development of the campus also became part of the responsibility of the department. Professor Popenoe was more interested in the biological sciences than in practical horticulture, and from 1881 to 1883 his title was professor of botany and zoology, superintendent of orchards and grounds, but horticulture and entomology were still part of the department.

In 1883 the Board of Regents established a new department with Dr. William A. Kellerman as its head. This was created by combining the instruction in botany, zoology, physiology, and geology; and Doctor Kellerman's title was professor of botany and zoology. The new title of Professor Popenoe was professor of horticulture and entomology, superintendent of orchards and gardens. In 1894 Silas C. Mason was made assistant professor of horticulture, and though Professor Popenoe still remained head of the department, the work in horticulture practically was separated and under the direction of Professor Mason. The next year he was made professor of horticulture and superintendent of orchards and gardens,

and Professor Popenoe became professor of entomology and zoology. Horticulture thus became an entirely separate department.

In the rearrangement of departments in 1897 the work in entomology was again combined with that of horticulture under Professor E. E. Faville. This combination was continued under Professor Popenoe from 1899 to 1901 when Mr. Albert Dickens was made assistant in horticulture, and Professor Popenoe's title was changed to professor of entomology and zoology. In 1902 Professor Dickens was made professor of horticulture, and the scope of the department has remained practically unchanged since. It has included forestry with the exception of a period from 1910 to 1917 during which an independent department of forestry was conducted by Professor Charles A. Scott.

Poultry Husbandry

The farm department for some twenty-five years gave a little attention to poultry. Interest in the poultry industry grew, and as the farm department underwent division, the charge of the poultry went with dairy husbandry. Considerable additions were made to flocks and equipment, and January 1, 1912, a separate department was established under the direction of Prof. W. A. Lipincott, which has been continued to the present.

Milling Industry

The department of milling industry was inaugurated March 1, 1910, by the separation from the department of chemistry of work related to the composition of wheat, and milling and baking tests of wheat and flour, and the inspection work required by the feeding stuffs law. This department was placed in charge of Leslie A. Fitz, who conducted it with ability and energy until July 1, 1923, when it was placed in charge of Prof. C. O. Swanson. Under his direction the department assumed a commanding position in the sphere of instruction and investigation in problems affecting the milling industry. Its standing in this field is such that several students have come from Europe to take advantage of the opportunities which it offers.

Housing the Agricultural Departments

In the old Bluemont College building Prof. E. M. Shelton, head of the farm department, used the southeast room on the second floor. The barn was on the new farm, and is now (1939) used for farm machinery. When the academic work of the College was moved to the new farm, the present campus, the barn was remodeled and made the College building. Professor Shelton used the southwest room on the first floor for departmental work.

Wooden buildings and sheds were erected for the animals near the southwest corner of the farm, on land now part of the athletic field area. In 1877 a stone barn 48 x 96 feet in size was provided. This was located on a site northeast of that now occupied by the east wing of Waters Hall. It was enlarged and altered several times before its removal in 1914. The material in it was used in the new animal husbandry barn, across the road to the north. A long chapter would be needed to recount the history of the barns and similar structures erected for the College, and maps and pictures would be required to render it intelligible. It would be an interesting chapter, but one difficult to write, and cannot be included here.

The north wing of Anderson Hall was built for "practical agriculture," and the west end of the first floor became the office and classroom for the farm department. More adequate quarters were provided by the erection in 1900 of the building now designated as Education Hall. This included a working creamery, which in 1904 was removed to a special building just north erected for the dairy husbandry department, later called Chemistry Annex No. 2, and in 1922, to the west wing of Waters Hall.

The department of agronomy as a distinct fraction of the old farm department was housed in the agricultural building erected in 1900 until 1913, when it was transferred to the east wing of Waters Hall, where it still remains.

The separate department of animal husbandry had its offices first in the agriculture building, now Education Hall, and was transferred to its quarters in the east wing of Waters Hall in 1913.

The department of poultry husbandry was given an office in the dairy husbandry building at first, January, 1912, but was transferred to the east wing of Waters Hall in 1913, and in 1923 was moved to the west wing of Waters Hall.

For care of the dairy herd a commodious wooden barn was provided in 1900. Improvements of this building and some additions were made from time to time, and several other buildings for special purposes were constructed in proximity to it. The need of more suitable quarters became quite acute, and the legislature of 1931 made an appropriation of \$60,000 for a dairy barn and experimental plant. The Board of Regents later decided to use only \$45,000 of this appropriation, and some of the old buildings were moved to the vicinity of the new barn to serve as a temporary provision for needs not met by the diminished structure.

The department of milling industry has been housed continuously in the east wing of Waters Hall. The mill itself doubtless insures the permanence of this arrangement.

DIVISION OF ENGINEERING

The evolution of the present extensive Division of Engineering traces from 1871 when mechanical work was afforded to a limited extent through the use of privately owned tools. A shop was built in 1872, and in 1873 the mechanical department may be considered to have been definitely launched under the superintendency of Ambrose Todd. For more than thirty years all mechanical work in the College was handled in that department. In 1898 it was designated as the department of mechanics and engineering, and in 1899 as mechanical engineering. This continued administration as a single organization undoubtedly made for efficiency.

Agricultural Engineering

A department organized to give special attention to farm machinery was created in 1915. For some years previously, the department of agronomy had given some work in this field, especially from 1910. The new department was named farm machinery. This was changed to farm engineering in 1918 and to agricultural engineering in 1922.

Architecture

The department of architecture is the result of continuous growth and development from 1871, when Miss Lizzie J. Williams was employed as teacher of drawing. The beginning of consistent coordination of the work in a distinct department was February 1, 1877, when Mr. John D. Walters was employed as "teacher of industrial drawing." The name of the department was changed from time to time better to indicate the scope of its work. Its growth was largely due to the interest that Professor Walters took in special students who did work beyond the requirements of the curriculum. Through this interest, performance and demand had become such by 1904 that a curriculum in architecture was established by the Board of Regents. At that time the name of the department became architecture and drawing, but since 1918 its catalogue designation has been simply architecture.

Civil Engineering

Work in surveying was given in the early years of the College. Most of the time this course was in charge of the department of mathematics. In the spring of 1907 this instruction was taken over by the department of mechanical engineering. In October, 1907, the Board voted to establish a curriculum in civil engineering, and in September, 1908, Prof. L. E. Conrad was placed in charge of the work in civil engineering under the direction of Dean McCor-

mick. In September, 1909, the separate department of civil engineering was organized under Professor Conrad and is still so continued.

Electrical Engineering

The department of electrical engineering had its inception in a compound department designated as physics and electrical engineering. This was a recognition in 1899 of the inauguration of the curriculum in electrical engineering which the Board of Regents placed in charge of the department of physics. July 1, 1908, electrical engineering and physics became separate departments.

Mechanical Department and Others Derived from It

March 23, 1910, the Board of Regents authorized the division of the department of mechanical engineering. The departments thus formed, as announced in the catalogue for 1909-10, were applied mechanics and hydraulics, mechanical drawing and machine design, power and experimental engineering, shop methods and practice, and steam and gas engineering. This organization of the work gave opportunity for distribution of primary responsibility, with its stimulus to industry, efficiency and planning for the future. It also expressed more adequately the status of engineering in the College.

Dean McCormick was definitely the head of the department of power and experimental engineering, but he also maintained close contact with the others derived from the old department of mechanical engineering. In advance of the time when the Division of Mechanic Arts was organized with supervisory authority assigned to the dean, these departments practically were directed by Dean McCormick.

Later developments in departmental organization in these areas of activity follow substantially the lines planned, with some changes in names, usually in the direction of simplicity. Power and experimental engineering was abandoned as a separate department when Dean McCormick left in 1913, and its courses were distributed among other departments.

The name of the department of steam and gas engineering was changed to mechanical engineering in 1922. Through the years, the names of other departments have been changed from time to time without creating ambiguity or indicating change of scope, but these do not require attention here.

When the old mechanical engineering department was dismembered, in addition to the departments of instruction created, a service department was set up which has been designated through most of the years as the heat and power department.

Throughout the history of the College the facilities of the shops and the skill and courtesy of superintendents have been used for constructing or repairing articles belonging to the various departments. In the budget for 1919-20 this activity was first recognized by separate provision for the department of building and repair. The importance of this service department has constantly increased since. At present (1939) the superintendent of maintenance, Mr. Geo. R. Pauling, is responsible for this department, the service of the custodian, and the heat and power department.

Housing Engineering Departments

As departments of mechanic arts or engineering necessarily have more or less material equipment, there has been less moving of them about than has been the case with some others. The first mechanical service given by an employee of the College was in 1871 when Mr. Ambrose Todd, steward of the boardinghouse, used his own woodworking tools in the basement of the boardinghouse for any needed College work. He also used his own iron-working tools in the same way at his residence about a mile distant.

The fall of 1872 the College provided a frame building 20 x 40 feet in size near the boardinghouse. One end of this was used as a blacksmith shop, and the other for a carpentry and wagon shop. Most of the equipment belonged to Mr. Todd.

The fall of 1873 a stable, 18 x 36 feet in size, located near the College building, was taken from the veterinary department and fitted up with eleven benches for a carpentry, cabinet and paint shop. Twenty-five sets of carpenter tools and a few for general use were purchased, and regular daily instruction of students began.

In 1875 a building for instruction in industrial arts was erected on the new campus and work transferred to it. This is now the central part of the east side of the shop structures. In 1876 the frame building erected on the old campus was moved, and placed a short distance north of the new shop building, where it served as the blacksmith shop for many years. In 1891 after the erection of the new iron shop, it was moved to the rear of it and served as a foundry until 1899.

The first major addition to the buildings used by the mechanical department came in 1891 when an iron shop was erected connecting with the southwest corner of the wood shop. This was 40 x 80 feet in the clear, and iron-working machines occupied the east end, and blacksmith forges the west end. The catalogue for 1897-98, between pages 64 and 65, includes a cut showing floor plans of the shops and power house as they were at that time, including the temporary wooden foundries to the northwest of the iron shop.

The legislature of 1899 appropriated \$9,000, with which changes and additions were made in the shop structures. The wooden foundries were removed, and the space occupied by a new forge room. The space previously used for blacksmithing became an enlargement of the machine shop. Other significant additions and changes were made which are shown in floor plans published in the catalogue for 1898-99 between pages 104 and 105, and in later catalogues.

With an appropriation of \$5,000, an addition was built across the north end of the wood shop in 1904-05, and extensive changes were made in the floor plans of the second story. The second story of the addition was used for a drafting room, and that of the original building was converted into a hallway, recitation rooms, dark room, blue-print room, and a painting and varnishing room.

In 1905 the legislature appropriated \$3,000 for an addition to the boiler room, available in 1905-06, and \$3,000 for enlarging the engine room, available in 1906-07.

The legislature of 1907 appropriated \$85,000, available in 1908-09, which, as reported in considerable detail by Dean McCormick in the *Industrialist*, January 9, 1909, was used for erection of the east section of Engineering Hall, an extension of the carpenter shop, additions to the blacksmith shop, foundry, and pattern room, and a wash room and locker room. The extension of the carpenter shop was built across the south end.

The section of Engineering Hall was designed especially for a mechanical engineering laboratory and improvement of the power plant, and provided drafting rooms for the department of civil engineering. In later years it has been modified by extension of galleries to create a second floor in several parts.

The central and west parts of Engineering Hall were erected in 1921, using appropriations totaling \$190,000. This provides quarters in part for the departments of electrical engineering, civil engineering, agricultural engineering and architecture. Part of this section has a third story, all of which is used by the department of architecture.

The heat and power department was housed in space not easily described, but closely connected with the shops and the department of mechanical engineering. However, the legislature of 1927 appropriated \$315,000 for a heat, power and service building which was erected in 1928.

The foregoing statements have necessarily omitted many details, especially those involving temporary or minor structures. Mention should, however, be made of the use of the barracks erected during the World War. Most of these have been used by engineering

departments and have been very serviceable. Some of them have been moved to other sites to make way for the heat, power, and service building. Two are used by the department of agricultural engineering.

When Professor Walters took charge of the work in industrial drawing, the instruction was given in a large room in the northeast corner of the first floor of the "old barn," then the College Building. When the north wing of Anderson Hall was occupied in 1879, the drawing department was assigned the middle room on the second floor. When the central part was completed, drawing was transferred to the east room on the second floor of that section. As the work of the department grew, space in the attic was used, and in 1908 a floor was laid which reduced the chapel to one story in height, and created above five or six rooms for offices and classrooms for the department of architecture and drawing. The principal service of Professor Walters was rendered in these quarters in Anderson Hall. The work in architecture was transferred to the third floor of Engineering Hall in 1921, and the quarters in Anderson Hall left to the art department of the Division of Home Economics. This phase of instruction had been transferred in 1915.

DIVISION OF HOME ECONOMICS

The present Division of Home Economics began with instruction in sewing and millinery in December, 1873. The teacher, Mrs. Hattie C. Cheseldine, was designated as superintendent of the sewing department. Her successor, Mrs. Mary E. Cripps, had the same title. A kitchen laboratory was opened in the chemistry building in February, 1877, and the catalogue for 1875-1877 stated that instruction in household economy by lectures and kitchen practice had been fully tested and found feasible, and also pleasant and profitable to the students.

In 1880 enlargement of the work in household arts was recognized by changing the title of Mrs. Cripps to superintendent of the departments of sewing and household economy. In 1881 the title was made teacher of household economy and hygiene and superintendent of sewing. In 1884, Mrs. Nellie S. Kedzie being then at the head, the work was organized in two departments, and the superintendency of sewing was assigned to Mrs. Elida E. Winchip. However, through the force of her personality, Mrs. Kedzie to a large extent gave unity to the work in the home economics field throughout her connection with the College, which continued to 1897.

In 1897 Mrs. Helen Campbell was placed definitely in charge of "the domestic science departments," and was herself professor

of household economics. After her resignation in 1898, the superintendent of sewing, Miss Harriet Howell, was made independent of the professor of household economics, and in 1899 the name of her department was changed to domestic art. In 1899, also, the name domestic science was given to the department of household economics headed by Miss Minnie A. N. Stoner.

Later developments in the field of home economics and changes in organizational views have led to greater subdivision of the work, and the adoption of more discriminating titles for the departments. The names domestic science and domestic art have been abandoned, and the new departmental designations reflect the enlargement of the general field by including additional subjects and by expanding the treatment of old ones.

Enlargement of the Division of Home Economics by transfer of work previously handled in other divisions began by the creation in 1915 of a department from subjects taken from the department of architecture. The new department was at first designated as home art, then as applied art, and finally simply as art.

The old department of domestic art was much more meaningfully designated as clothing and textiles in 1919, and food economics and nutrition (1919) is much preferable to domestic science. The name household economics was at first (1919) given to a department including all subjects not otherwise classified. Further specialization in organization resulted in the establishment (1927) of the department of institutional economics and (1928) that of child welfare and eugenics. These include subjects transferred from the department of household economics, and many others which have been added. The name of the department of institutional economics was changed in 1936 to institutional management.

Housing Home Economics

The instruction in sewing and millinery offered in 1873 was carried on in the chapel of the Bluemont building. When the academic college work was moved to the present site in 1875, provision for sewing was made in the new building erected for industrial arts. This structure was not quite finished when the College year opened, and sewing seems to have been temporarily taught in the northwest room on the first floor of the transformed barn. Before September 25, it was in its place in the central part of the second floor of the building which is now the middle portion of the east section of the shops group. In the south end of this floor were three rooms used for instrumental music, and the room in the north end was used by the printing department. The room for telegraphy was between the two for printing and sewing.

A kitchen laboratory providing space for instruction in cooking was included in the south wing of the chemistry building erected in 1876, and work in this room began in February, 1877. This use continued until 1881.

In 1880 the printing department was transferred from the shops to the southwest room of the chemistry building, and in 1881 some of the space previously occupied by it was divided into music rooms. This change in respect to music was followed by placing the instruction in sewing in the old music rooms. At the same time the adjoining room that had been used for sewing became the kitchen laboratory, and the room used for that purpose in the chemistry building was abandoned.

The space thus provided for work in household arts soon became wholly inadequate, and when the south wing of Anderson Hall was completed, in January, 1885, rooms were occupied at the south end on the first floor, and at the east end of the south basement. Later, space in the basement of the adjacent corridor was also used. The rooms on the west side of the hall on the first floor were used by the sewing department. The others were the office, classroom and laboratories of the department of household economy, and it was there that Mrs. Nellie S. Kedzie for twelve years did the work that brought her in such favorable estimation in the state and nation.

With the growth of the College the need of more space for these departments became very pressing. An effort was made in 1895 to obtain an appropriation for a separate building for this work. This attempt was unsuccessful, but in 1897 an appropriation of \$16,000 was obtained. Success was attributed to a large extent to the personal work of Mrs. Kedzie in convincing members of the legislature that such a building was needed. The small structure was erected in 1897 as Domestic Science Hall, but in 1902 it was named Kedzie Hall in honor of Mrs. Kedzie. The domestic art department used most of the second floor, and domestic science the first floor, and the basement. One of the two large rooms of the basement was used as the dining room, and the other as the kitchen for the project of furnishing meals to students at a low price.

The growth of the home economics work which accompanied the great increase of students soon rendered Kedzie Hall quite inadequate, and President Nichols obtained from the legislature of 1907 an appropriation of \$70,000 to provide the building which was occupied in 1908, and in 1925 was named Calvin Hall, in honor of Prof. Henrietta W. Calvin, who had contributed much

to the development of home economics at the College and elsewhere.

When the departments of domestic science and domestic art moved to Calvin Hall, the department of printing was given the basement and much of the first floor of Kedzie Hall, but in 1915, the first floor was restored to use in the home economics field by the location of a cafeteria in it. This enterprise continued in such use of the space until 1922, when it occupied a building erected especially for instruction and practice in the operation of facilities for providing meals. This building was named Thompson Hall in 1925, in honor of Dr. Helen B. Thompson, who was dean of the Division of Home Economics, 1918 to 1923.

Work in the field of institutional management is also carried on in Van Zile Hall in caring for nutritional needs of the residents. Practice and instruction in home management require the use of three residences which are leased for this purpose, and the nursery schools, which are laboratories for child guidance, are housed in another residence.

In 1915 instruction in color and design, home decoration, and other courses in art for students in home economics, that were being taught in the department of architecture and drawing was transferred, to the Division of Home Economics, but continued to be given in rooms in Anderson Hall, as previously. When architecture classes were moved to Engineering Hall in 1921, the art department occupied the space vacated, and with some modifications is still (1939) housed in the central part of the second and third stories of Anderson Hall.

DEPARTMENTS IN THE DIVISION OF GENERAL SCIENCE

The general subjects taught in the College at first followed closely the pattern of other colleges of that period. The ancient languages, mathematics, English literature, mental and moral science, and natural history were recognized in the titles of the early members of the faculty, but English language seems to have been regarded as only a fit subject for preparatory work. By 1869 political economy was included in the teaching field of President Denison, and to this, history was added in 1871.

English

In 1874 Prof. J. H. Lee was designated as professor of English and history, and elementary English was taught by Prof. J. E. Platt. After the resignation of Professor Lee, Prof. M. L. Ward became professor of mathematics and English. In 1882 the work in English and history required the addition of an instructor who

handled both subjects. Later this developed into a professorship of English and history. History was finally separated from English by the creation, in 1890, of a department of history and constitutional law. This left Prof. Oscar E. Olin in the chair of English language and literature, and other subjects have not been combined with the department since that time. For the period 1911 to 1916 this general field was conducted in two departments, English language and English literature. Since 1916 the two aspects of the work have been united in one department, the department of English.

Public Speaking

Considerable attention has been given by the College from its first years to the present, to written and oral presentation. For many years this work was divided among members of the faculty, and was not always efficiently conducted. Gradually responsibility for it was centered in the department of English, and one member of the staff given charge. In 1897 a separate department of oratory was established with Prof. Fredric A. Metcalf as its head. Oratorical work in public speaking was then offered for two or three terms in each curriculum as a regular study, while the work in composition was connected with the several courses in English. In 1903 the department name was changed to public speaking, and this has been used continuously since. Prof. J. E. Kammeyer began his service to the institution at that time as professor of public speaking.

In connection with the department of English, Professor Searson fostered work in argumentation and debate, and this work was conducted by members of the department of English. However, in September, 1923, this activity was transferred to the department of public speaking, and put in charge of Prof. H. B. Summers, who still conducts it.

Presentation of dramatic productions on the initiative of students took place at an early date, and has been continued more or less enthusiastically ever since. Assistance was rendered by members of the faculty, and about 1920 general supervision of these presentations was taken over by the department of public speaking, and one or more members of the staff have devoted much time to the development of this form of public expression. Formal courses in dramatics have been offered in the department since 1923.

Journalism and Printing

A department of printing may be said to have been organized when A. A. Stewart began work as teacher of printing April 1, 1874, although previous to that time some instruction in printing

had been given by Pres. John A. Anderson and Mr. Melchior Shillerston as early as December, 1873.

The publication of the *Industrialist*, which began April 24, 1875, continually promoted an interest in writing. The curriculum in printing, which was established in 1908, provided for some instruction in reporting. In 1911 a curriculum in industrial journalism was established, and in 1913 the curriculum in printing was abolished, but instruction in the printing art was continued.

The department of industrial journalism began with the appointment of Prof. Charles J. Dillon in 1910. The departments of printing and industrial journalism were administered independently until July 1, 1915, when the superintendence of printing was placed under the professor of industrial journalism, at that time Nelson Antrim Crawford. This plan of organization has been continued to the present time.

Housing of the Department of Printing

No other department of the College which has material equipment has been shifted about as much as has the printing department. Some of the moves cannot at this date be definitely described, or described in terms that are readily intelligible to the present generation.

President Anderson was determined to inaugurate, or to enlarge the instruction in several industrial arts, and did this in some cases with no proper provision for housing the equipment or imparting instruction. Printing was an art, the equipment for which was very simple at that time, and a specially constructed building was not required for it. In later years heavy presses and other pieces have tended to enforce permanence of location and solidity of foundations.

The first equipment for printing was placed in the chapel of the building that was given to the State by the Bluemont Central College Association, and Mr. A. A. Stewart states that the boys used to throw type down the stairways until protective measures were taken. In the spring of 1874 the department was in a residence that had been built for the professor of agriculture which was located a short distance north of the College building. It remained there only a few weeks, and was moved to the ground floor of a residence which had been occupied earlier by Professor Platt. It is still standing, across the road from the southeast corner of the old College farm, the corner on which the historical marker concerning Bluemont College is placed. The department remained there until June, 1875, and the first six numbers of the *Industrialist* were printed in that building.

From June 5 to the end of August, 1875, the *Industrialist* was printed in a building on the south side of Poyntz Avenue, and a short distance east of Second Street. It was moved about September 1, to the north end of the second floor of the new industrial arts building, the oldest part of the present shops group.

In order to transfer instruction in cooking from the chemistry building to the shops building where sewing was taught, the printing department was moved in 1880 to the southwest room of the chemistry building where it had better quarters. It remained there until 1884, when the room was required for chemistry, and printing was returned to the shops building. The sewing and cooking were moving to Anderson Hall, and the printing department was installed in the room which had been used as the kitchen laboratory.

In August, 1893, the department moved to better quarters in the southwest basement rooms of Anderson Hall. In January, 1898, the removal of the home economics work to Kedzie Hall allowed the two rooms in the southeast corner of the basement of Anderson Hall to be assigned to the printing department. The former kitchen laboratory became the composing room.

This department in its assignments to quarters has had an almost uncanny relation to the home economics activities. When the latter were installed in Calvin Hall, the former followed by occupying the basement and much of the first floor of Kedzie Hall in 1908. This ample provision was severely curtailed in 1915, when the cafeteria was located on the first floor and printing relegated to the basement. However, when Thompson Hall was built and occupied by the cafeteria in 1922, the first floor of Kedzie Hall was allotted to the department of industrial journalism and printing, and it has maintained its occupancy to the present (1939). In the meantime a porch with basement had been added (1917), and this space is of some advantage.

Modern Languages

Instruction in modern languages, while given to a limited extent in the earlier history of the institution, has for the most part been of comparatively recent development. Prof. A. S. Hitchcock organized a class in German for the benefit of his graduate students to prepare them to refer to works in botany written in the German language. German continued to be taught by volunteer teachers, and the demand became such that in 1904 a department of German was established under the direction of Dr. John V. Cortelyou.

German was made a required subject in a number of the curricula and was a recognized elective in others, and in 1917 instruction in French was provided for, and the name of the department was changed to modern languages. In 1918 instruction in Spanish

began, and this department has continued to render service not only to students of the sciences but to those interested in literature.

History and Government

For many years history was taught as an additional subject by professors whose chief interest was elsewhere. From 1882 to 1890 it was included with English, but in the latter year it was made independent under Prof. Francis H. White as professor of history and constitutional law. Since then history has remained independent of other departments, except that from 1899 to 1904 economics and history constituted a single department. The work in civics, constitution, government, and law has remained associated with history since 1890.

Economics

The provision for instruction in political economy or economics has had a devious course. The president of the institution presented this subject for many years, but in 1892 the burden was shared by making Professor White professor of history and political science. In 1894 Thomas E. Will took over the field of economic science from President Fairchild and Professor White. He continued to give instruction in that subject after he became president in 1897, but Dr. Edward W. Bemis held the professorship of economic science. In 1899 the attention given to this general field by the College was greatly reduced, and Dr. Carl E. Boyd was made professor of history and economics. The two subjects remained in a single department until 1904, as already noted, when Prof. J. E. Kammeyer became professor of economics, and Prof. R. R. Price continued with history and civics.

President Waters was eager to have more special attention given to agricultural economics, and in 1913 an assistant professor, Edward D. Baker, was added to the staff. Two years later he was succeeded by Theodore Macklin.

In 1918 President Jardine elevated the work in agricultural economics to the status of an independent department with Professor Macklin as its head, and W. E. Grimes was assistant professor. The work in agricultural economics from that time has outstripped that in the general field, and in 1936 on the death of Doctor Kammeyer, head of the department of economics, the entire subject was consolidated under the leadership of Doctor Grimes. It is administered in two sections, one in the Division of General Science, the other in the Division of Agriculture. The former is designated as economics and sociology; and the latter, as agricultural economics. The section of economics and sociology also includes courses in accounting and business administration.

Mathematics

Mathematics was not accorded a completely separate department until 1883, when Prof. David E. Lantz was made professor of mathematics. Previous to that time mathematics was combined with other subjects, and even later some of the instruction in mathematics was given by teachers whose primary work was in other departments. The professorship in mathematics has, however, continued from that date, and with the growth of the department several professorships have been provided in it, as well as positions of lower rank.

Military Science and Tactics

The importance of instruction in military science and tactics, required by the organic act, was so keenly felt in 1863 that attempts were made to obtain a teacher for this subject, but these were unsuccessful until 1868 when Brevet Major General J. W. Davidson was detailed from the War Department. He took up departmental work with vigor, but his detail was withdrawn in 1870.

After the recall of General Davidson, the chair of military science and tactics remained unfilled until 1881 when Lieutenant Albert Todd was detailed by the War Department for the performance of this duty. Lieutenant Todd also gave instruction in certain other subjects in the College. The department has been in continuous operation since that time, and in some instances members of the staff have taught other subjects in addition to those in military science and tactics. For many years the staff consisted of one officer, but since the World War there has been a marked increase in the personnel, and in the equipment available for use in instruction.

Physical Education and Athletics

Some general exercises in calisthenics were given under the direction of Professor Platt early in the history of the College; in fact, physical exercise of some kind was provided before Professor Platt came. Voluntary participation in games and exercises was exhibited by students who were assisted by student instructors, and by members of the faculty, but a department in charge of physical training was not organized until Miss Florence A. Ball was appointed to take charge of such instruction for young women. Her services began October 10, 1899. The department continued in operation, for young women only, until 1911 when Nichols Gymnasium became available, and a general department of physical education was organized with Prof. Guy S. Lowman as director. The department has been operated and developed continuously

since that date, and has had no connection with any other department but was organized to meet a long recognized need.

Music

Music as a cultural subject was emphasized when the College was first opened, and training in both vocal and instrumental music has been offered continuously. As the number of students increased and the demand for music, the number on the staff has increased. It is difficult to assign a definite date for the beginning of the department of music. During the earlier years the teachers of music depended wholly upon fees paid by the pupils, and a department can hardly be said to have existed. In 1882 the professor of music received a salary of \$200 for general services rendered to the College, this being in addition to fees paid by the students. In 1884 this salary was increased to \$500, and instruction in vocal music was made free. Students of instrumental music continued to pay fees to the professor of music. In 1893 all music fees were abolished, and the professor of music received all of his remuneration through a salary paid by the College. Since that date, all members of the music staff have received salaries, and have been independent of fees. In 1915 the music department was reorganized to a marked degree, and provision was made for individual private lessons for which fees are charged, which go into the general receipts of the College.

With the exception of vocal music as taught by Professor Platt, from 1864 to 1883, no teaching of music has had any connection with another department than that of music.

The Science Departments

The importance of education in the sciences was recognized at the beginning of the history of the College, and one of the members of the first faculty, Prof. J. G. Schnebly, was professor of natural science and lecturer on agricultural chemistry. Professor Schnebly remained only two years. Within that time he taught classes in physiology. Prof. Benjamin F. Mudge became professor of natural science and higher mathematics January 1, 1866, and it seems probable that he was the next to give any scientific instruction at the College. Professor Mudge's special field was geology and mineralogy, but he gave instruction in botany, zoology, entomology, physiology, astronomy, meteorology, natural philosophy, and other subjects also. From this all-comprehensive department other science departments arose, and for some of the subjects handled by him independent departments have not yet been established.

Botany

Prof. J. S. Whitman was employed in 1873 as professor of botany and entomology. He was succeeded in this field of instruction in 1876 by Prof. Elbridge Gale. Throughout succeeding years botany has been one of the subjects named in the titles of a series of professors. Under Professor Gale horticulture was combined with it, and from 1879 to 1883 under Professor Popenoe zoology was also added to the department. In 1883 botany and zoology only were named in the title of Professor Kellerman, but he taught geology and physiology also. In 1888, however, all subjects excepting botany were transferred to other departments, and botany has since remained a separate department in the institution. The great attention given to plant pathology in the work of the department led in 1920 to a change in name, making it the department of botany and plant pathology.

Zoology

Instruction in zoology began at least as far back as 1873 in connection with the department of natural history with Prof. B. F. Mudge as its head. Zoology was first recognized in the title of a professor in 1881 when E. A. Popenoe was designated as professor of botany and zoology and superintendent of orchards and gardens. In 1883 Professor Kellerman became professor of botany and zoology, other subjects being also attached to the department. In 1888 instruction in zoology was taken over by Dr. R. F. Burleigh, professor of physiology and veterinary science, and zoology did not appear in an academic title again until 1895 when Professor Popenoe was entitled professor of entomology and zoology. This alignment of work continued only until 1897 when, although instruction in zoology continued, it was not named in a departmental or academic title. In 1900 Dr. S. Sisson was made professor of zoology. In 1901 entomology and zoology were again united under Prof. E. A. Popenoe and remained associated in a single department until 1912. Practically, the department was divided, on October 1, 1912, when George A. Dean became head of the work in entomology and Dr. R. K. Nabours of that in zoology. In 1913 the department was formally separated into two which have continued to the present time and under Professors Dean and Nabours, respectively.

Entomology

The economic importance of insect depredations caused attention to be given to the study of entomology in the College at a very early date. Entomology was taught for the first time as a class study in the spring of 1872, but lectures on the subject had been

given previously. Students were much interested in making collections, about 800 species being collected by H. A. Brous. During the fall term of 1872 Prof. C. V. Riley, state entomologist of Missouri, lectured on entomology for several weeks beginning September 19. In 1873 Prof. J. S. Whitman was elected professor of botany and entomology and taught elementary and advanced classes the winter and spring terms of 1874. Professor Whitman records beginning the establishment of a collection of insects, and he also reared insects in vivaria. Professor Whitman's connection with the College closed with the end of the College year 1875-76, and Prof. C. V. Riley was again employed to deliver his course of lectures in November, 1876. These lectures were presented before the classes in botany. Four evening lectures were given in the Presbyterian church for the benefit of the general public. From 1877 to 1883 entomology was taught by the professor of botany and horticulture, but the subject was not recognized in his title. In 1883 Professor Popenoe became professor of horticulture and entomology, and this combined department continued to 1894, when horticulture was separated from it, and Professor Popenoe became professor of entomology and zoology. This separation continued until 1897, when horticulture and entomology were again combined under Prof. E. E. Faville and later under Professor Popenoe. However, in 1901 Professor Popenoe again became professor of entomology and zoology, and those departments remained united until 1912-13, when two distinct departments were created.

Bacteriology

Recognition of the importance of microorganisms and extensive study of them has developed within the period of the operation of the College. Serious work in this field began in the department of veterinary science. Professor Fischer gave much attention to this study and was influential in incorporating a course in bacteriology in the College curricula. In 1907 a department of bacteriology was created, and Prof. Walter E. King was elected to be its head. The department has remained distinct and independent since its establishment.

Housing of Biological Science Departments

In the old Bluemont College building botany, entomology, and geology were taught in the southwest room of the second story in 1873, and probably earlier, also. When the College was moved to the new campus in 1875, these subjects were assigned to Prof. J. S. Whitman in the southeast corner, first floor of the transformed barn. The building erected for horticulture in 1876 also housed botany, entomology, and zoology from that date to 1886 when

botany and zoology were placed in the further remodeled "old barn," entomology remaining with horticulture. Fairchild Hall when first built was called Library and Agricultural Science Hall, and on its completion in 1894 instruction in botany, zoology, and entomology was transferred to it. When Dickens Hall was built in 1907 the department of botany was transferred to it. The department of entomology has remained in Fairchild Hall, with the exception of 1897 to 1899 when it was administered with horticulture, the classroom being in the Armory.

Zoology was attached to the department of veterinary science from July, 1897, to December, 1900, and from September, 1899, to September, 1901, was housed with the department of veterinary science in the Armory. From December 13, 1900, to June 30, 1901, zoology was under Dr. Septimus Sisson and independent of the department of veterinary science. Physiology was attached to the new department. This excellent arrangement ceased when Doctor Sisson resigned, effective June 30, 1901. From July, 1901, geology, zoology, and entomology have been cared for in Fairchild Hall.

From 1897 to 1899 bacteriological work in connection with the department of veterinary science was carried on in Fairchild Hall. In 1899 this was transferred to the Armory, now (1939) Farm Machinery Hall. In 1902 Fairchild Hall was enlarged, and bacteriology was assigned space on the second floor in the northwest part of the newly constructed addition. When Veterinary Hall was built in 1908, quarters for the department of bacteriology were provided in it.

Chemistry

One of the important steps in the separation into special departments of the work handled by Benjamin F. Mudge as professor of natural science, consisted in the establishment of the department of chemistry and physics under William K. Kedzie. This chair was established in 1873, and Professor Kedzie with his enthusiasm and ability at once made the new department a prominent feature of the College.

Though physics was combined with chemistry in the department, it did not receive the attention that its importance demanded, and indeed the most advanced work in this field was designated as chemical physics. In 1885 physics was separated from the department, and the title of the department head, George H. Failyer, changed to professor of chemistry and mineralogy, and this title was continued to 1897. Since 1897 chemistry only has been recognized in the name of the department.

The department of chemistry as started by Prof. W. K. Kedzie and continued by his successors was the first to offer work and

carry on research in several lines which later were incorporated in other departments, or made the basis of a new one. Professor Kedzie was the first one in the College to make experiments in household chemistry and cooking. A few years later cooking was provided for in the department of household economy. In the department of chemistry, lectures were given on the chemistry of foods, which later developed into a course in human nutrition. This course in 1918 was transferred to the Division of Home Economics and made a part of the department of food economics and nutrition. For many years a course in agricultural chemistry was given, which included study of the chemistry of soils and fertilizers, plant growth, and animal nutrition. Later this work was taken over by the departments of agronomy, botany, and animal husbandry. As early as 1904 the department of chemistry began work on the chemistry of flour and factors entering into the baking qualities of flour. This work was developed to a very significant extent, especially by Prof. C. O. Swanson. An experimental mill was purchased for use in the production of flour from small quantities of wheat. In 1910 this field of investigation was taken from the department of chemistry and a new department, that of milling industry, organized. Prof. L. A. Fitz was put in charge of this department March 10, 1910. Professor Fitz resigned his position July 31, 1923, and Prof. C. O. Swanson was made head of the department of milling industry, effective July 1, 1923. The ability and previous excellent service of Professor Swanson in this field were thus recognized. These successive separations of fields of activities originally included in the department of chemistry are indices of their growth in scope and importance.

Physics

Physics under the name of natural philosophy was taught in the College at an early date. Instruction in this subject was announced for the year 1866-67, and Prof. J. S. Hougham reports teaching classes in 1868-70. Some fine physical apparatus was purchased at this early period. Somewhat later, after the resignation of Professor Hougham, Professor Mudge taught natural philosophy as well as other sciences in connection with his professorship of natural science. With the engagement of Prof. William K. Kedzie in 1873, physics and chemistry were combined in a department for him. These two subjects remained in this combined department until 1885, when a department of mechanics, physics, and engineering was established under Prof. E. B. Cowgill. In 1887 Professor Cowgill resigned, and the department was abolished. The work which he had been handling was distributed. On September

1, 1887, F. J. Rogers was appointed to be an instructor, with special reference to the classes in physics, and he remained in charge until 1889. In 1889-90 the course in physics was taught by Lieutenant J. F. Morrison of the department of military science and tactics. In 1890 Mr. E. R. Nichols was employed as instructor in physics and superintendent of telegraphy. Professor Nichols was given a leave of absence for the year 1894-95, and elementary physics was handled by Prof. Thomas E. Will and the fourth-year physics by Prof. G. H. Failyer. Professor Nichols returned in 1895. In 1899 a curriculum in electrical engineering was established, and the technical subjects were assigned to the department of physics, and Professor Nichols was designated as professor of physics and electrical engineering. Professor Nichols becoming president of the College, Mr. B. F. Eyer was elected professor of physics and electrical engineering in 1900. For the year 1901-02 Professor Eyer was on leave of absence, and Prof. L. W. Hartman served in his place for that time. The two subjects remained combined until July 1, 1908, when electrical engineering was left with Professor Eyer, and John O. Hamilton became professor of physics. Professor Eyer resigned, effective January 1, 1913, and the department of electrical engineering was placed in charge of Professor Hamilton, but the departments should not be regarded as combined. Professor Hamilton remained in charge until September 1, 1914. Since that time the department of physics has been independent of all others.

In the earlier years of instruction in natural philosophy and physics, experimental work, excepting that of advanced students, was limited almost entirely to the professor's lecture table. When Denison Hall was built, provision was made for laboratory instruction in physics. This began in 1902-03. This department was housed entirely in Denison Hall, and its equipment was a total loss when that building burned August 3, 1934. From 1934 to 1939 its work was carried on as well as possible in the west wing of Waters Hall, necessary apparatus being purchased. In August, 1939, it was installed in the north end of the new Physical Science Building, and shared in the benefits of the appropriations for the building and its equipment. The department of chemistry was the other beneficiary. The total of the State and Federal appropriations was \$722,533.81. The departments also possess considerable apparatus purchased to meet necessities between 1934 and 1939.

Other Sciences

Other science departments might well be organized in the College; for example, geology and physiology. Both of these lines of

work are now attached to the department of zoology. A department of genetics might also be established by consolidation of the work in this field now being conducted in several departments. The development of these subjects has to a considerable extent been dictated by their practical applications.

Housing of Physical Science Departments

The provision of offices and classrooms for departments giving no laboratory work, and having comparatively little material equipment, is a simple matter compared with obtaining rooms or buildings for the use of scientific and technical departments.

When the department of chemistry and physics was created in 1873, a lecture room and a laboratory were provided on the north side of the second floor of the old Bluemont building. The water supply was in a barrel, and other facilities were comparable, but the interest of students was notable. In 1875, when the College work was transferred to the new campus, the department of chemistry and physics used the east half of the second floor of the building now known as Farm Machinery Hall.

Recognition of the importance of chemistry developed to such an extent that an appropriation for a building especially for the department of chemistry and physics was obtained, and it was erected in 1876. This building was planned by Professor Kedzie, and in preparation he visited many institutions in England and on the European continent. This is the building, now Mathematics Hall, which for many years was known as Chemistry Annex No. 1, but the interior has been greatly modified from time to time. The original plan was very simple, but Professor Kedzie was extremely enthusiastic in respect to its fitness for his use, and indeed for that point in the history of the State it was doubtless a highly creditable structure.

On May 31, 1900, the chemistry building erected on the initiative of Professor Kedzie was destroyed by fire. The walls, however, were not seriously damaged, and the building was reconstructed and used for physical training of young women until 1911 when it was turned back to the department of chemistry. As a result of the fire the department was scattered over the campus, and its activities were conducted in several different buildings until Denison Hall was completed and occupied in the fall of 1902. The building was shared with the department of physics and electrical engineering, and the growth of the chemistry department made it necessary to take over the old building, which was named Chemistry Annex No. 1.

In 1923, when the west wing of Waters Hall was completed,

the building previously occupied by the department of dairy husbandry was vacated, and that department was installed in the new Waters Hall building. The department of chemistry was in great need of additional room by that time, and the dairy building was turned over to it and renamed Chemistry Annex No. 2. It is now (1939) designated as Chemical Engineering Hall.

When physics was separated from the department of chemistry and physics in 1885, the new department of mechanics, physics, and engineering was given quarters in the southwest corner of the second floor of the south wing of Anderson Hall. The department had apparatus cases in the adjacent corridor to the north.

After Kedzie Hall was occupied by the home economics department in 1898, the classwork in physics was transferred to rooms at the south end of Anderson Hall, first floor. In 1902 rooms for physics and electrical engineering were provided in Denison Hall, the entire west end being used.

Denison Hall was ruined by fire of unknown origin August 3, 1934. It was housing at that time the department of physics and a large fraction of the work in the department of chemistry. The destruction of the building made it necessary to provide elsewhere for this work, and for five years it was scattered over the campus, largely in West Waters Hall, greatly to the inconvenience of other departments, and to reduction of efficiency in the work in chemistry and physics.

The legislature of 1935 made no provision for replacing Denison Hall, but that of 1937 made appropriations of \$250,000 for 1936-37, \$150,000 for 1937-38, and \$50,000 for 1938-39, for a building and equipment. This was supplemented by a grant of \$272,533.81 made for building and equipment for physics and chemistry by the Federal Public Works Administration to enable the building to be completed in accordance with the plans. This splendid structure was occupied in August, 1939. It is three stories in height, with a full basement and considerable attic space in addition, and is the most commodious building on the campus. Its new equipment is of a very high order of excellence.

DIVISION OF VETERINARY MEDICINE

Veterinary work in the College began with the appointment of Dr. Henry J. Detmers to be professor of veterinary science and animal industry. He began service April 5, 1872. He had presented lectures at the Farmers' Institute held the preceding January. The department opened a clinic which operated from May 1 to June 19, 1872, and resumed service November 25, 1872. Patients were treated free of charge except for food and medicine. The

title of Professor Detmers suggests that the veterinary science work was an adjunct to instruction in animal husbandry and not for professional preparation of veterinarians. Because of controversy with the new administration the veterinary department ceased to exist in February, 1874.

Courses of lectures in veterinary medicine were given from time to time, but no department recognizing this field existed again until 1888 after the establishment of the Agricultural Experiment Station. At that time Dr. R. F. Burleigh was chosen to be professor of physiology and veterinary science and began service May 1, 1888. Professor Burleigh resigned June 30, 1889, and his successor, Dr. Nelson S. Mayo, was not appointed until November, 1890. This department was not primarily for the training of veterinarians, and Doctor Mayo gave instruction in physiology and in some other subjects not indicated in his title.

In 1897 Paul Fischer became professor of veterinary science. Doctor Fischer in addition to veterinary lectures gave instruction in microbiological lines. At that time the veterinary department was conducted in Fairchild Hall, but it was moved to the armory in October, 1899.

In 1901 the work was divided, Dr. Tait Butler being made head of the department of veterinary science and Dr. S. Sisson head of a department of zoology. In April, 1907, the Board of Regents created the department of bacteriology with Prof. Walter E. King as its head. This has remained a department separate from veterinary science.

A curriculum in veterinary medicine was offered beginning the fall of 1905. Growth of the department and increase in the number of students in the curriculum led to the separation of the department of veterinary medicine from the Division of Agriculture and the establishment of a Division of Veterinary Medicine in 1919. Dr. R. R. Dykstra was made dean of this Division. The work of the Division is organized under three departments, anatomy and physiology, pathology, and surgery and medicine. Close cooperation is maintained among these departments.

Housing the Division of Veterinary Medicine

When Dr. H. J. Detmers held the chair of animal husbandry and veterinary medicine, he was assigned a stable near the College building, which was doubtless used for the clinics which he conducted in 1872. In 1873 this stable was taken from him and used for instruction in carpentry, and he himself lost his position in 1874.

When the veterinary work at the College was resumed in 1888, instruction was carried on in the armory, then the current name

of the "old barn." This continued until 1908, with the exception of the college years 1897-98 and 1898-99, when Doctor Fischer had his office and classroom in the second story, northeast corner of Fairchild Hall.

Veterinary Hall was erected 1907-08 and was an excellent building for its time. The local editor of the *Industrialist* referred to it as "the finest veterinary building in America." It has served its purposes well.

Shelter for clinical cases was very inadequate, consisting of a small frame building on the north campus. In 1921 an appropriation of \$100,000 was made to provide for the erection of part of a well-planned, commodious structure to constitute a veterinary hospital with modern and ample facilities for clinical instruction. This was occupied in 1923.

The department of veterinary medicine began the manufacture of anti-hog cholera serum in 1909. A plant was built on the old College farm. This included a frame laboratory, pens for hogs, a cement concrete water tank, and other improvements. Experimental use of the product began in 1909, and early in 1910 general sale to the public commenced. The demand for the serum grew very rapidly, and a direct saving to the State of \$150,000 within the first six months was a "conservative estimate." The need of a more ample plant became evident, and in 1913 the Board ordered that one be built. At first the plan was to place it on the site then occupied by this enterprise, but the protests of farmers in the neighborhood, who considered some features to be a nuisance, and others a threat to their swine, prevailed, and it was decided to erect the new plant on the hill north of the campus.

A brick building 20 x 60 feet in size, and two stories and a basement in height, was built, and extensive yards and subsidiary structures provided. This plant manufactured serum for public sale until 1930. Since 1935 it has been designated as the Veterinary Research Laboratory building.

DIVISION OF COLLEGE EXTENSION

University extension, which may be taken to mean the extension of university work beyond the institutional premises and to persons in adult life, began in England in 1867 and attained significance in 1873. In this country the first direct efforts to introduce it were made in 1887, and more formal organization of the work took place in 1890, and the first elaborate presentation of it was made in 1891. The University of Chicago, which opened in 1892, included a distinct division of university extension.

In Kansas State College, work coming within this classification

was inaugurated June 23, 1868, through the following resolutions which were adopted by the Board of Regents:

Whereas, it is incumbent on the regents not only to provide for the well being of the College by selecting learned and practical teachers for the several chairs, but also to extend the benefits of the institution to the people of the state at large, therefore:

Resolved: That the president and professors be requested, as far as practicable, having in consideration their own health and usefulness in their respective chairs, to visit the more populous settlements of the state, and by free converse, as well as by formal lectures, make known the character and aims of the State Agricultural College.

Resolved: That the president of the college be requested to superintend this outside work, and so to divide it among the whole faculty that it may be burdensome to none but profitable and health-giving to all.

Resolved: That a system of lecturing on agricultural subjects at this college, and in the populous settlements of the several counties of the state, should be continued, so that the benefits of farming according to correct agricultural principles may be disseminated throughout the state.

These resolutions embody the fundamental idea of extending college benefits to the people of the State at large in its more populous settlements by means of formal lectures and free conferences. The field of instruction in this work was that of agriculture. University extension was interested chiefly in studies related to the humanities and the liberal arts and sciences. In 1891 in respect to university extension the faculty voted that "the work of the farmers' institutes is more nearly in line with our work as a college, and all that we feel prepared to engage in at present."

Institutes had been conducted for teachers and for ministers, and it was the idea of Rev. Elbridge Gale, a member of the Board of Regents, that farmers' institutes might be held with the object of promoting the interests of farmers as the other institutes promoted those of teachers and preachers. He seems to have introduced the use of the word institute for such meetings, although groups of farmers in states farther east had undoubtedly held meetings for mutual improvement previous to that time.

The first farmers' institute was held in connection with the Union Agricultural Society of Manhattan, November 14, 1868. This was very favorably received by the public, and extensive accounts of it were printed in the *Manhattan Standard* and the *Kansas Farmer*. Its practical relation to the public needs of the time

was shown by the subjects presented. President Denison spoke on "Relations of the Kansas State Agricultural College to the Agricultural Interests of Kansas." The subject treated by Prof. B. F. Mudge was "Tree Borers." Rev. Mr. Gale spoke on "Culture of Forest Trees," and Prof. J. S. Hougham's subject was "Economy on the Farm." Each of these lectures was discussed by the audience, and Professor Mudge exhibited a collection of three hundred species of insects belonging to Mrs. Thomas C. Wells.

November 20 and 21, 1868, an institute was held at Wabaunsee, a village about fifteen miles east of Manhattan. No report in detail is extant concerning this institute, but the plans indicate that the same members of the College faculty attended, and that C. B. Lines and perhaps other local speakers participated. This was the first farmers' institute held outside the College or Manhattan.

The first of a series of annual institutes held at the College was conducted the same winter, January 18 to 21, 1869. The plane of excellence reached is shown by the eminence of the speakers who were on the program. In addition to members of the faculty, Mr. G. W. Murtfeldt, editor of Colman's *Rural World*; Prof. S. T. Kelsey, of Ottawa; George T. Anthony, editor of the *Kansas Farmer*; Professor Norton, of the State Normal School; and Washington Marlatt, R. D. Parker, E. L. Foster, Welcome Wells, N. B. White, and Thomas C. Wells, who were prominent in agriculture or horticulture in the State, contributed to the list of papers and addresses presented.

These annual meetings at the College continued until 1874. In practically every case, distinguished out-of-town talent added to the value and interest of the programs. One of the most noted speakers in 1871 and 1872 was Prof. C. V. Riley, the most prominent entomologist in the West at that time. He was later employed to give a course of lectures at the College. J. A. Warder, a prominent Ohio pomologist, was another speaker. For the institute of 1871, railroad transportation and a fee of \$50 each were given Messrs. C. V. Riley, William Muir, Joseph Bushman, and Doctor Howsley. Mr. Bushman was a veterinarian, and in 1872 Dr. H. J. Detmers gave veterinary lectures and soon after was added to the faculty of the College.

The institute held at the College in February, 1874, was marked by a speech by Rev. Washington Marlatt criticizing the Anderson administration of the College, then in its first year, but serious controversy was avoided. However, the administration discontinued the holding of farmers' institutes at the College and did not conduct any elsewhere.

The Bluemont Farmers' Club was organized January 31, 1873,

while President Joseph Denison was still at the head of the Agricultural College. This club included some members of the faculty of the College, as well as progressive farmers of the vicinity. Under its auspices, farmers' institutes were conducted in public halls in Manhattan, beginning in February, 1876, and continuing for more than ten years. Rev. George T. Fairchild became president of the College December 1, 1879, and the *Industrialist* warmly commended the institute held in January, 1880, and the opinion was expressed that a hundred such institutes should be held in different parts of the State the next winter.

In January, 1881, President Fairchild contributed an article to the *Industrialist* in which he advocated the inauguration of a system of farmers' institutes, and described the system used by the Michigan State Agricultural College. The people of Abilene, through Hon. T. C. Henry, requested assistance with a farmers' institute held in February, 1881, and the Board of Regents directed President Fairchild and Professor Shelton to attend. At the same meeting of the Board, Regents Purcell and Fairchild were appointed a committee to decide upon applications for assistance at farmers' institutes, and limiting the number to four for the winter.

The next season, requests for institutes were received by the College, and the faculty voted to have a committee on farmers' institutes, and Professors Ward, Failyer, Popenoe, Shelton, and President Fairchild were appointed such a committee. This committee and its successors considered all matters related to farmers' institutes and made recommendations to the faculty, which body took final action. Such a committee continued to function until 1906. During the winter of 1882, six farmers' institutes were assisted. These were held at Clay Center, Glasco, Burlingame, Great Bend, Holton, and Burlington, and were the first ones in the series conducted under the plan of the Fairchild administration. This plan required that applications be presented to the college for assistance with an institute. The approval of an institute included a requirement that at least half the program should be furnished by local speakers, thus insuring some local interest. The purpose was to help others to help themselves. A frequent plan for the program was to begin with an evening meeting one day and have three sessions the next day, ending with an evening session. Regular organizations were made in each case, and these might hold meetings at other times than those when faculty members were present. The number of institutes held each year was gradually increased, and by 1897, the last year of President Fairchild's administration, the number was 19. In 1895 and 1896, 22 had been held each year.

An attempt to bring special instruction to farmers was made

by the College from 1893 to 1896. A short course of lectures covering about two weeks was given at the college. Most of the material was presented by members of the faculty, but some prominent speakers were brought in from the outside. After a trial of four years, the plan was abandoned "on account of the meager attendance from outside the immediate neighborhood." It was further explained that "farmers find it difficult to leave their work and their homes for the two weeks required and hesitate to bear the expense of a journey. At the College this extra course becomes something of a burden in being added to work already abundant." This series illustrated the ineffectiveness of attempting to apply the college extension idea without carrying the work to points more or less remote from the campus.

With the first year of the Will administration the practice was adopted of organizing institutes to be held in series of towns along lines of railway. This made it possible to hold more institutes without increasing the financial expense to the College. It resulted, however, in a tendency to making these institutes occasions for hearing lectures from members of the faculty without much other participation by the residents of the locality. The system, however, continued in use.

In 1905 a new feature in the method of approach appeared. It was the practice of railroad companies then, as it is still, to encourage the development of agriculture and industries along their respective transportation lines. In April, 1905, the St. Joseph and Grand Island Railway operated a dairy train over its line in Kansas and Nebraska, and Oscar Erf, professor of dairy husbandry in the College, accompanied it and made addresses at all the stations along the Grand Island system. The trip covered four days, and the train included a lecture car, three exhibit cars for apparatus and dairy products, and a Pullman. This was the first train of the kind in Kansas.

In the fall of 1905, President Nichols induced the Chicago, Rock Island and Pacific Railway to finance and transport a farmers' institute train over its entire system. The subjects discussed were wheat and corn. It was one of the most perfectly conducted agricultural trains ever transported. It was accompanied by President Nichols and Professors TenEyck, Shoesmith, and Willard, of the College, and by officials of the Rock Island system.

Within the year ending June 30, 1906, farmers' institute trains were also operated over the Kansas lines of the Atchison, Topeka and Santa Fe, Union Pacific, Missouri Pacific, and St. Louis and San Francisco railways.

The purpose of the early institutes was briefly stated as "to find

the shortest and surest way to profitable farming," but the scope of the programs was gradually enlarged to include matters of the home, not only as related to farming but to housekeeping, and many of the lectures on the programs had a cultural rather than a financially profitable object. The speakers, therefore, included members of the faculty outside those directly connected with agriculture and horticulture. Faculty members were usually willing, or even eager, to accept appointments to farmers' institute duty because of the opportunities thus afforded for becoming acquainted with the State. Attending institutes in those pre-automobile years was often accompanied by physical hardships such as loss of sleep through railroad travel at night, and poor hotel accommodations in respect to both lodging and meals. But the contacts made with the people, and with rural life as it was lived, were worth all the inconvenience.

By 1905 the value of farmers' institutes in the several localities of the State had become so thoroughly appreciated, and demands for assistance from the college on such programs had reached such a volume, that the Board of Regents employed Mr. John H. Miller to serve as field secretary and organizer of farmers' institutes. He took up this duty October 10, 1905.

Mr. Miller was educated for the ministry, had been president of Campbell University, and a newspaper editor. By nature, training, and experience, he was a fluent and effective speaker and a ready and persuasive writer. He was also thoroughly imbued with the spirit of altruism. He carried on his work here not merely as a means of earning a salary but with a genuine devotion to promotion of the interests of the agricultural classes. He often spent his own money in meeting expenses that were not otherwise provided for. He had such confidence in the value of the farmers' institute meetings that he spared no pains to get out an audience. At least once he went up and down the main street ringing a hand bell to attract the attention of people, and to obtain an opportunity to urge them to come to the meeting in the afternoon.

Mr. Miller at once began to enlarge the work in extension beyond that of holding farmers' institutes, and within a short time inaugurated plans for boys' corn-growing contests for the season of 1906, and for girls' cooking and sewing contests. Within a year he planned a State farmers' institute to be held from December 27, 1906, to January 5, 1907. The features of this institute consisted largely in courses in grain judging and stock judging for the boys.

From October 15 to December 15, 1906, more than one hundred institutes were held in different parts of the State, and at about seventy of them corn breeding and production was the principal topic. An important feature of Mr. Miller's early plans was to em-

phasize strongly a few subjects in agricultural practice throughout the State instead of having a group of miscellaneous subjects at each institute.

In July, 1906, Mr. Miller's title was made "superintendent of farmers' institutes," and June 22, 1907, the board voted that "the department 'farmers' institutes' shall hereafter be known as the 'department of farmers' institutes and college extension'." It was given jurisdiction over the following lines of work: "First, to conduct farmers' institutes; second, to have charge of all efforts on the part of the college to foster the study of agriculture in the public schools; third, to have direction of corn contests and like efforts to arouse popular interest in the general subject of agricultural betterment, and incidentally to direct the attention of young men and young women to the educational facilities of this institution."

Mr. Miller used the *Industrialist* for announcements concerning extension work, and for the publication of educational material. This medium was too restricted, and he began the publication of series of pamphlets. Unfortunately these were somewhat unsystematically designated. At first they carried the general title, "The *Industrialist*," in order to obtain the benefit of the postage rates for second class matter. Later a publication was entered which was designated as "*Agricultural Education*." Different series of publications were issued under one or the other of these general titles. In this way, announcements concerning the extension work planned and reports of that completed were given very wide circulation. In addition, pamphlets giving scientific and practical knowledge were prepared and circulated among teachers of rural schools and grammar grades of town and city schools.

In carrying out the general plan of the department, Superintendent Miller visited about twenty-five teachers' institutes during the summer of 1908 and presented the claims of agriculture as a school study.

Up to June 30, 1909, the extension force consisted of the superintendent, an assistant part of the time, and one or two stenographers. A great increase in the financial support made it possible beginning with July 1, 1909, to employ a number of specialists. Of these, the ones for 1909-10 were P. E. Crabtree and G. C. Wheeler, farm management; C. H. Hinman, dairying; C. V. Holsinger, horticulture; W. S. Gearhart, highway engineering; Frances L. Brown, home economics; and E. L. Holton, rural education.

Professor Holton did not begin his work until April, 1910. He was placed in charge of the introduction of agriculture, shop work, and home economics in rural, graded, and high schools of the state. He also had charge of the corn contests, the boys' and

girls' corn clubs, and the recently introduced correspondence courses. Professor Holton was gradually transferred to work in resident instruction.

The lines of work carried on in 1909-10 included farmers' institutes, agricultural railway trains, publications for institute members, publications for teachers, school house campaigns, movable schools, correspondence courses, boys' corn-growing contests, girls' cooking and sewing contests, home economics clubs, demonstration farming, highway construction, special campaigns, and rural education.

In 1910-11, G. C. Wheeler was designated as a specialist in animal husbandry as distinguished from farm management. The engineering work was enlarged, W. S. Gearhart being in charge of highway engineering; H. B. Walker, drainage engineering; and A. R. Losh, assistant in bridge engineering. M. Josephine Edwards was added to the personnel in home economics, and George S. Hine succeeded Mr. Hinman in charge of dairying.

September 1, 1911, Mr. Miller's title was changed to "director of college extension." In 1911-12, Harry L. Kent was given complete charge of correspondence courses and the lecture bureau, and Mr. Gearhart's title was changed to "state highway engineer." Mr. G. W. Conn was employed as superintendent of farmers' institutes. In home economics, Miss Edwards retired, and Miss Ella M. Nash, Mrs. Mary E. Simmons, and Miss Nellie L. Thompson were added to the staff.

October 29, 1912, the department of college extension was by order of the Board of Regents elevated to become the "Division of College Extension." The Division consisted of the following departments: Farmers' institutes and demonstrations, highway engineering and irrigation, home economics, and correspondence study.

In 1912-13, C. D. Steiner had charge of boys' and girls' clubs in the department of farmers' institutes and demonstrations. This year was also very important in that it included the introduction of the appointment of district agricultural agents and the co-operation with county organizations in the appointment of county agricultural agents. The first district agricultural agents appointed were W. A. Boys for west central Kansas, Clyde McKee for northwest Kansas, and G. E. Thompson for southwest Kansas, who were appointed February 1, 1913. H. J. Bower was appointed for southeast Kansas, March 1, 1913. The first county agents appointed were P. H. Ross, Leavenworth County, August 1, 1912; E. J. Macy, Montgomery County, March 1, 1913; O. P. Drake, Cowley County, March 1, 1913; W. E. Watkins, Allen County, May 1,

1913; and F. P. Lane, Harvey County, June 1, 1913. Further personnel changes will not be completely followed in this outline of the Division of College Extension.

The Smith-Lever law became effective May 8, 1914, and additional funds thus made available supported great enlargement of the work of the Division of College Extension. The legislature of 1915 enacted the farm bureau law, which became effective March 12, 1915. This law was considerably amended March 22, 1919. Dean J. H. Miller resigned his position August 31, 1915, and most of the developments connected with the Smith-Lever and the farm bureau laws took place under his successors.

Edward C. Johnson had been superintendent of farmers' institutes from September 1, 1912, and was appointed to succeed Dean Miller, September 1, 1915. After more than three years of able administration, he resigned and was succeeded by H. J. C. Umberger, January 1, 1919.

Expansion of Scope

The expansion and modification of extension work is indicated to a considerable extent by changes in the designations of the departments organized in the Division of College Extension. The best indication available in respect to these is the series of catalogues of the college. One of the original departments of the Division was that of farmers' institutes and demonstrations. In the catalogue for 1917-18 the name of this department is given as institutes and extension schools. This emphasizes the increased importance of the extension schools conducted by the Division and the transfer to the Agricultural Experiment Station of all demonstration work in which records are kept. The catalogue for 1931-32 designates this department simply as that of extension schools. This reflects the practically complete disappearance of farmers' institutes from the program of the Division. The establishment of special features of the work of the Division has completely absorbed the services previously rendered by farmers' institutes.

The radio broadcasting station distributes its programs more extensively, if not more effectively, than does any other agency used by the Division of College Extension. In 1923 the Board of Administration appropriated \$250 to defray the expenses of faculty members who appeared on radio programs broadcast by the *Kansas City Star*. Mr. E. R. Lyon, of the physics department, suggested that the powerful station KFKB at Milford be used for broadcasts by remote control through the telephone line from Manhattan. Mr. Lyon, with Samuel Pickard and Louis C. Williams, constituted a trio through whose technical knowledge, enthusiasm,

and hard work serious obstacles were overcome early in February, 1924. All this was with the complete support of President Jardine and Dean Umberger, who approved offering an extension radio curriculum. This "college of the air" was opened February 11, 1924, and courses in poultry, dairy and live stock, crops and soil, agricultural economics, and home economics were offered. The promoters of this enterprise had visions of enabling listeners to qualify to receive college credit on the subjects offered. To assist in obtaining such proficiency, those interested were furnished with mimeographed copies of the lectures given.

While the college of the air, as such, can hardly be considered to have been a great success, the broadcasting of educational and recreational programs has developed to an enormous extent.

The interest in broadcasts by remote control was such that the State Board of Administration allotted \$20,000 for the erection of a broadcasting station at the College. This was announced May 28, 1924. A 500-watt transmitting set was installed, and the station officially dedicated December 1, 1924. A program of especial interest to the alumni of the institution was broadcast. Since that time, the organization and preparation of programs to be distributed by radio have been among the principal activities of the Division of Extension in this College.

The department of agricultural agent work was separated from the department of farmers' institutes and demonstrations in 1917-18. At that time much additional work fell upon this body of men, and the personnel was greatly extended by the employment of emergency demonstration agents. The salary of these emergency agents was furnished by Federal funds, and other expenses up to \$800 were paid by the counties. The purpose of the Government was to place agricultural agents in every county to assist in meeting the farm problems growing out of the war. In some cases, districts of two counties were formed. These agents cooperated with the county councils of defense. In 1920-21 the designation of this department was changed to county agent work.

The original home economics department of the Division of College Extension was called upon during the World War to conduct work throughout the State designed to render more efficient the use of food and textiles, and a department was organized designated as emergency home demonstration agent work. Miss Frances L. Brown was transferred November 1, 1917, to the headship of this department, and more than twenty others were employed in that work. July 1, 1919, the word emergency was dropped from the name, and the department designated as home demonstration

work. The war had ended, but work of this character was continued but with a greatly reduced force.

The catalogue continued to indicate the maintenance of separate departments of home economics and home demonstration work, although beginning with 1923 both departments were administered by Miss Amy Kelly. For 1924-25 Miss L. Maude Finley was head of the department of home economics, but from 1925 to 1936 Miss Kelly administered both departments. Miss Kelly resigned February 15, 1936, and the two departments were consolidated under the name home economics.

The boys' and girls' club work was one of the earliest extensions of the farmers' institute work under Superintendent Miller. It was included in the work of the department of farmers' institutes and demonstrations until 1917-18, when the catalogue shows a separate boys' and girls' club work department, with Otis E. Hall as state club leader and including five additional members in the personnel. All but one of these were supported in part by funds from the United States Department of Agriculture. In the catalogue for 1926-27 the name of this department first appears as boys' and girls' 4-H club work.

The influence of these clubs of boys and girls on the agriculture and homemaking of Kansas cannot be overestimated. From the winter of 1906-07 the work of boys' and girls' clubs was an important feature of the State farmers' institutes and of farm and home week. Beginning with 1923, the club round-up was separated from farm and home week and held at the College in May or June. The meetings of these clubs on the campus are among the most colorful events of the college year.

The correspondence study department provided for in 1912 in the Division of College Extension was changed in designation in 1915-16 to be home-study service, and in 1935-36 it was changed to home study department. It does not appear that there were any material changes in the functions or management of this department to account for these changes of name. The Board of Regents, January 14, 1910, authorized the department of college extension to establish correspondence courses in the various departments relating to farm life. The catalogue for 1909-10 gave a one-page announcement of the courses which it would offer by September, 1910, and stated the classes of persons whom it was desired to serve in this way. This work was at first under the general charge of Prof. E. L. Holton, but July 1, 1912, Harry L. Kent was made responsible for all study by correspondence.

The courses offered by correspondence were subject to approval of subject-matter departments, and examinations in courses in-

tended to give college credit were under the direction of the appropriate resident departments. The scope of the work offered was gradually extended to include reading courses, study centers, courses giving credit on college entrance, courses giving credit toward graduation from college, and special services.

The department of highway engineering and irrigation, one of those provided for when the Division of College Extension was established, had much to do with state construction of highways, bridges, etc., but in 1917 the legislature provided for a State Highway Commission in order to cooperate with an act of Congress approved July 11, 1916. The direct connection of the Division of Extension thus ceased, and the name of the department was changed to drainage and irrigation engineering. Service to rural communities in other lines of engineering work seems to have been stressed to an increasing extent, and in 1920 the name of this department was made drainage, irrigation, and farm engineering. In 1922 the name was simplified to merely rural engineering. This short but comprehensive name is most suitable.

In May, 1914, the department of rural service was established under the leadership of Walter Burr. Its principal purpose was the organization of social centers and community welfare clubs, and the strengthening of religious and social conditions in rural communities. This department was discontinued in 1922.

Financial Support of Extension

The early farmers' institutes were supported entirely by allowances of a few hundred dollars from general college funds. The legislature of 1899 appropriated \$2,000 for each of the next two fiscal years, and the same amount was appropriated for succeeding years up to June 30, 1905. Immediately subsequent appropriations were somewhat irregularly designated but were approximately \$2,000 annually.

The legislature of 1903 passed a law providing that in any county in which a regularly organized farmers' institute has been in successful operation for at least a year it is the duty of the county commissioners to appropriate annually \$50 toward its support. In 1909 the scope of this law was enlarged by adding a provision that \$15 a year should be appropriated to each of not more than six local institutes in a county. To be eligible to any of these appropriations, the institute must be certified by the College.

For 1909-10, 1910-11, 1911-12, 1912-13, 1913-14, and 1914-15 the appropriations for extension by the Kansas legislature were \$25,000, \$27,500, \$35,000, \$40,000, \$45,000, and \$50,000, re-

spectively. These appropriations covered other lines besides farmers' institutes.

With the passage of the Smith-Lever Act, effective May 8, 1914, statements of the funds available to the Division of College Extension became much more complicated and will not be included here. For the year 1924-25, the total amount available was \$283,526.

Previous to 1914, county agents were financed by membership dues and private subscriptions. At that time a membership of at least one hundred, paying dues of \$5.00 each, was required. The Smith-Lever Act, and the farm bureau law, became the basis for county agent work. (Catalogue, 1920-21, page 368.)

One of the most important events in the history of extension work was the passage of the law providing for support of farm bureaus. This was passed March 12, 1915, and significantly amended March 22, 1919. Under the amended provisions, "whenever there shall be organized in any county in the state of Kansas a county farm bureau having a membership of 25% of the *bona fide* farmers of the county, or as many as 250 farmers, and having for its purpose the giving of instruction in agriculture and home economics to the people of said county through practical demonstrations and otherwise, and the employment of a county agricultural agent or agents to prosecute this work, the Kansas State Agricultural College shall contribute from Federal and State funds for demonstrations in agriculture and home economics not less than \$1,200, as far as such funds are available, toward the salary of such county agricultural agent or agents." The farm bureau law also provides that the county commissioners shall appropriate not less than \$1,200 per annum to assist in the payment of the salary of the county agricultural agent and the expenses of the farm bureau.

The farm bureaus organized under the provisions of this law have practically made farmers' institute organizations unnecessary and without a sufficiently independent field of operations to warrant their continuance. In 1919 the number of institutes conducted in the state was 300. This dropped in 1920 to 55, and since 1931 the number held has never been more than four, and usually only two, each year. This shows that the original type of organization, with the changes in our social and economic life and the development of several distinct agencies to operate therein, has itself gradually fallen into complete atrophy.

The national service of the farm bureau system can scarcely be overestimated. This has consisted not only in fostering all sorts of enterprises tending to advance rural conditions, which is its

normal continuing field, but it has also been a coherent, well-organized system which has been of the greatest value to the Nation in two emergencies. When the United States entered the World War, the farm bureaus constituted immediately effective agencies for inauguration of agricultural programs designed to aid this country in performing its part toward winning the World War. Again when the government, through the Agricultural Adjustment Administration, inaugurated a complex and nation-wide series of programs, the farm bureau organizations were ready and immediately available for utilization in putting these into effect and administering their details. The part of the national Government in the support of these bureaus gave it a legitimate basis for calling upon them for this service. The education, integrity, personality, and knowledge of local conditions possessed by county agricultural agents were invaluable. Without their work, it would have been impossible to carry out the programs of agricultural adjustment with any prospect of success.

Other important laws supporting extension work are the Capper-Ketcham Act, approved May 22, 1928, and the Bankhead-Jones Act, approved June 29, 1935. Funds have been provided for special purposes from time to time, some of which continued for years. One of the most important was the supplementary Smith-Lever Fund.

Throughout the history of agricultural extension work, it may be said that the unifying principle has been that of making it the agency through which scientific advancement, mechanical improvements, and means of social betterment have been brought to the knowledge of rural communities and introduced into their daily life. For example, in the course of the last seventy years the explanation of the fertilizing value of leguminous plants has been discovered. Tests for infection by tuberculosis have been adopted. Conferring of partial or complete immunity to certain diseases through the use of vaccines and serums has become available. The silo has come into use. The Babcock test and centrifugal cream separator have made the creamery industry possible. Internal combustion engines and the wide distribution of electric power have revolutionized farm conditions in many respects. The list might be extended at considerable length, and the utilization of these numerous ameliorations of rural life has been due to a large degree to the extension services of the several states and counties.

EARLY HISTORY OF PHYSICAL EDUCATION AND ATHLETICS
AT THE COLLEGE

A very interesting book might be written concerning the origin and development of intercollegiate athletics in the United States. Such a book would give an opportunity for study of the relation of athletics to general education, health, morality, and scholarship. The preparation of so comprehensive a book would entail extensive research, and demand the exercise of judicial ability of a high order. The present writer is not in position to prepare a work of such scope, or even the segment that experience at Kansas State College might furnish, but in this article hopes to present in connected form data not readily accessible in reference to physical education and athletics as they developed at the College. Because of limitations of space the treatment is necessarily rather sketchy, and lacks many details that the enthusiast might find interesting.

Symmetrical development of the body, and to a large extent personal health, may be attained by the coordinate use of various gymnastic exercises which may be carried on by an individual independently of others. Interest leading to effective persistence in such exercises is increased when they are performed in groups working toward the same end. It has also been found that with most persons the incentive to regular practice of healthful gymnastics is insufficient to insure its continuance. The competitive impulse is very strong in mankind, and this is utilized to obtain physical training through games, even though the development is less complete and symmetrical than that given by intelligently prescribed gymnastics.

The unsymmetrical development which may be obtained through playing one game may be corrected or supplemented by playing others also. It has been found that a successful program of physical education seems to require the including of athletic sports and games in which competition among the participants, or with opposing groups, is involved, even though their more strenuous features may require careful medical supervision.

EARLY ATTENTION TO PHYSICAL TRAINING

The importance of having a sound body to house a sound mind has been recognized for such a length of time as to have become proverbial. Attention was given to physical exercises in the College from its inception. The first annual report, dated December 22, 1863, states that exercises in calisthenics and new gymnastics, with a ride on horseback once a week, were included in the regular work of the students. In a comment upon the work of the College, within two weeks after it first opened, the *Manhattan Stand-*

ard, September 14, 1863, printed: "The exercises in calisthenics and gymnastics, with the military drill and the ride on horseback once a week, are matters of special interest."

I. T. Goodnow, as state superintendent of public instruction, in his report for 1866, wrote: "A beautiful feature in the school is the gymnastic exercises. Every morning, immediately after the opening, the whole school, male and female, are put through the drill, inhalations and exhalations of air from the lungs, training of the voice in the enunciation of the elementary sounds of the letters, and other elocutionary practice. These exercises have a wonderful effect in developing manly forms, in rectifying weak lungs, crooked spines, and deformities in general. As a consequence, the students are remarkably healthful."

Numerous statements in newspapers, College catalogues, and annual reports show that calisthenic exercises were regularly practiced throughout the Denison administration. Prof. J. E. Platt seems to have been in charge, and in his annual report for 1872 he mentions, as part of his daily work, "a short drill of all the students in calisthenics."

The *Kansas Radical* printed a report of a game of baseball between the Blue Mont club and the College club which was played November 3, 1866, and won by the Blue Mont club on a score of 38 to 21. The names of the players were given with other details. The local papers gave reports of many games within the period 1866 to 1875, and a college club was usually one of the contestants. In a game with the Blue Rapids Clippers which lasted four hours and twenty minutes, the College team won on a score of 83 to 7. "Them wuz the days."

Students played baseball in the field east of the old College building, as observed by A. A. Stewart, and the Marlatt boys who lived just north used to bring out apples to sell to the players.

During the '80s and '90s groups of students played baseball for recreation and to a limited extent had contests among themselves. Games with outside teams were sought but met with little encouragement from President Fairchild or the faculty. Such diversions were not regarded as promotive of the educational program of the College.

THE BEGINNING OF ORGANIZED ATHLETICS

The beginning of organized athletics at the College may perhaps be properly credited to the formation of the Athletic Club. A petition, signed by J. E. Brady and others, was presented to the faculty, February 26, 1883, in which permission to form a gymnastic club was requested. March 12, President Fairchild reported

that the Athletic Club had perfected an organization and submitted its constitution and bylaws for approval by the faculty. After consideration by a faculty committee which reported favorably, the constitution and bylaws were approved by the faculty, March 19, 1883.

It was not possible to assign a room to the use of the Athletic Club, but interest was maintained, and in January, 1885, the armory was opened the fifth and sixth hours and instruction in light gymnastics given by Lieut. W. J. Nicholson. The armory was on the first floor of the building later known as Farm Machinery Hall, and Lieutenant Nicholson was the professor of military science and tactics. H. A. Platt, a senior student, was instructor the fall of 1885. The armory continued to be used for athletics and physical training for men until 1911, when Nichols Gymnasium was occupied.

The Athletic Club had the voluntary assistance of some members of the faculty, and the cooperative assistance of its own members. September 29, 1890, a special committee of the faculty submitted recommendations which were adopted as follows: "(1) That there shall be appointed a standing committee which shall frame rules for exercises in the gymnasium and shall have general charge of athletics of the College; (2) the president of the Athletic Association shall be held responsible for the good conduct and obedience to rules of those using the gymnasium; (3) that the Board of Regents be asked to appropriate money for improving the gymnasium of the young men and fitting up an exercise room for the young ladies. Adopted."

October 13, 1890, the faculty voted to ask the Board to provide better facilities in the gymnasium, and it was understood that the Athletic Club would donate its property to the College. The faculty also voted that the professor of physiology should have charge in person or by proxy of all exercises in the gymnasium. Dr. N. S. Mayo came to the chair of physiology and veterinary science October 15, 1890, and was thus at once brought into direct contact with the athletic activities of the College. As Doctor Mayo was much interested in sports, this responsibility was entirely agreeable to him.

Beginning the fall of 1891, the more direct daily contact with the young men was intrusted to a student assistant who was himself interested and more or less proficient in athletics. The student assistants and the years of their service, respectively, were: J. N. Bridgman, 1891-92; C. E. Freeman, 1892-93; W. A. Cavanaugh and F. E. Uhl, 1893-94; R. S. Kellogg, 1894-95, two terms (?); F. V. Dial, spring term 1895, and years 1895-96 and 1896-97;

O. R. Smith, 1897-98; and F. J. Howard, 1898-99. Mr. Howard seems to have been the last student employed in that capacity.

September 24, 1894, the supervision of the gymnasium was transferred from Doctor Mayo to Capt. H. G. Cavanaugh, professor of military science and tactics, whose detail at the College expired August 31, 1897. When O. R. Smith was the student instructor, he was under the direction of the president of the College and the chairman of the committee on athletics.

INTERCOLLEGIATE ATHLETICS

The Athletic Club was more or less interested in sports as well as in gymnastics. Games between local groups were played, and from time to time permission was sought to play with out-of-town teams. Apparently the number of men interested varied greatly from year to year, and continual pressure in respect to a given sport was not maintained. In January, 1892, the faculty refused to grant permission to students to play football elsewhere than on the College grounds.

Considerable history of the change in attitude toward out-of-town games may be lost in unrecorded actions of the committee on athletics which exercised some power independently of the faculty. December 18, 1893, the faculty voted that "no body of students shall engage in contests with other than local organizations without the consent of the faculty." This covered contests in other fields as well as in athletics.

The first out-of-town game authorized by the faculty seems to have been a football game with the students of Saint Mary's Academy, which was played on Thanksgiving Day, 1893. A good many of the students and faculty accompanied the team, and the College team won by a score of 18 to 10.

May 26, 1894, the baseball team played the Academy team at Saint Marys, and the fall of that year the faculty gave the football team permission to play against teams at Abilene, Fort Riley, and Saint Marys. In 1896 a game of football was played at Junction City with the Fort Riley team. In 1897 the baseball team was allowed to play ten games of which four were out of town, but no one not an actual member of the College was to be allowed to play. A paid coach was employed for the football team the season of 1897, and intercollegiate athletics may be considered to have been fairly launched at that date.

NICHOLS GYMNASIUM

The opening of Nichols Gymnasium the fall of 1911 greatly enlarged the opportunity for physical training of all kinds, includ-

ing supervised participation in recreational intramural sports, and in intercollegiate contests on the campus, or at other institutions. Guy S. Lowman was elected professor of physical education and director of physical training. All work in this field was placed under his direction, the department of physical training for women being absorbed by the new department of physical education.

No requirement of physical education for men in college curricula was imposed at first, but young men in the subfreshman course, and from 1912 those in the school of agriculture, were assigned to one year of that work. For men in college curricula the department offered all its facilities for voluntary work in gymnastics and sports, and the director was the coach for all sports. Later, as the number increased, additions to the departmental faculty were made, and the coaching was distributed with the intention of having each sport handled by one specially qualified.

THE ATHLETIC COUNCIL

It is not the purpose in this article to follow in any detail the development of athletics from 1911, but a few salient points will be included. The Board of Regents established an athletic committee in 1911, to "be responsible for the athletic policy, rules for eligibility, to schedule games, and to act on all matters pertaining to the athletics of the institution." The committee consisted of three members of the faculty to be appointed by the president of the Board, and two students appointed by the Athletic Association. This committee was usually designated as the Athletic Board, and since 1926-27 the College catalogue has used the name Athletic Council. The composition of this committee and the procedure for selection of its members have been changed several times. In 1916 the Board of Regents approved an Athletic Board consisting of President Waters, Dean W. M. Jardine, and Professors H. H. King, R. A. Seaton, and Geo. A. Dean. To these, Prof. Z. G. Clevenger was added after he was elected director of athletics. Since then, appointments to the committee have been made by the president of the College, and the Athletic Council now (1939) consists of eight members of the faculty.

DEVELOPMENT OF THE REQUIREMENT OF PHYSICAL TRAINING

For the year 1912-13 announcement was made that men who had completed one year of military training would be permitted to choose between military training and physical training for a second year. This provision was abandoned after one year, and in 1914 an arrangement was worked out by which a man on an athletic team could be transferred from military work to physical

education for the season of the sport in which he participated. At the end of the season he was returned to military training, and he could not participate in more than two sports each year. This plan was announced last as for the year 1916-17.

The physical examination of drafted men in 1917 and 1918 disclosed unsuspected, preventable body imperfections in thousands of cases. This situation caused a national awakening to the importance of physical education. May 25, 1918, the faculty adopted a report made by a special committee which recommended that all freshman men be given physical training twice a week, and that this include a course of lectures in hygiene and social problems. This was in addition to military training. In 1919 the faculty referred to the Council of Deans the question of physical education for men, and that Council voted that all men students who entered in 1918 or later would be required to take two years of physical training. These requirements are still in force except that transfer students are relieved of from one to four semesters of this work, depending upon the amount of the total advanced credit submitted.

Administration is very flexible in respect to the type of work required. The needs and wishes of the student are met through floor work, games, and sports. Competent men may be transferred to athletic teams, and thus a large supply of material is always available. An extensive program of intramural sports is carried on in addition to the training for intercollegiate contests.

ADMISSION TO THE MISSOURI VALLEY CONFERENCE

The superiority demonstrated by the College athletic teams over most of those in the Kansas Athletic Conference led, beginning about 1909, to a movement toward gaining admission to the Missouri Valley Conference. The standards of eligibility to participate in intercollegiate competition were higher for the latter conference, and in 1910 the Athletic Association decided not to apply for admission because some of the members of the College team would be ineligible. By 1911 admission was desired, and the coaches and athletic representatives were willing to admit the College, but the college and university presidents at the conference saw that the College was ineligible for membership as long as its entrance requirements were below fifteen units of high-school work. This impediment may have influenced some persons in respect to supporting the adoption of standard admission requirements. At any rate, after admission was based on graduation from a four-year high school, the College was admitted to the Missouri

Valley Conference. This was December 7, 1912, effective September, 1913.

May 18, 1928, the College, with the universities of Kansas, Nebraska, Oklahoma, and Missouri, and Iowa State College, withdrew from the Missouri Valley Conference and formed the Missouri Valley Intercollegiate Athletic Association, commonly called the Big Six.

ACTIVITY FEE

Financial support for athletics was for many years inadequate and uncertain. The levy of an athletic fee to be paid by each student was advocated by many and opposed by a sufficient number to prevent its adoption. New ground was occupied in a proposal that an activity fee should be charged, in the benefits of which other student enterprises should share as well as athletics. Legal difficulties were encountered, which were removed by legislative action in 1917.

By a nearly unanimous vote at a mass meeting of the students January 20, 1922, the charging of an activity fee of \$5.00 per semester was endorsed, and this was authorized by the State Board of Administration. A budget committee was appointed to allot the funds to athletics and other activities including intercollegiate judging teams. Payment of the fee provided free admission to athletic contests, debates, band concerts and oratorical contests. The fee is collected by the College with other fees at enrollment each semester, and the attorney general has given an opinion that the administrative authorities have no right to exempt any student from payment of it.

June 15, 1935, the Board of Regents increased the activity fee to \$7.50 a semester, and increased the projects eligible to support from it to include literary, dramatic and divisional activities, the *Collegian*, and Royal Purple, each student to receive these two publications free. This action of the Board was in accordance with a vote of 1,887 to 125 in favor of it by the student body in December, 1934. The Board voted that "hereafter no changes will be considered as to increase in the activity fee in any school until the question has been submitted to the student body and received the approval of at least 80 per cent of those eligible to vote." The undergraduate student enrollment at that time was 2,632, and the 80 per cent requirement would have made an affirmative vote of 2,105 necessary.

ATHLETIC FIELDS

Closely parallel to the progress in athletics has been the provision of athletic fields. Early baseball games were on vacant town

lots. For many years formal and informal and even intercollegiate contests were waged in the north part of the Manhattan city park. In the fall of 1897 the city council of Manhattan granted the use of the public square bounded by Eighth and Vattier streets and Bluemont and Juliette avenues. This was five blocks from the Vattier Street entrance to the College campus.

The students donated many toilsome hours to conditioning the ground and to building a tight board fence around the field. Manhattan business men paid for the fencing materials. Football games were played on this field in 1897 although the fence was incomplete. By the spring of 1898 the fence was complete and the ground leveled for baseball. The need of a roofed grandstand was not met until May, 1901. Servicing the field was necessary from time to time, and the boys who did the work were sometimes cheered by the presence of girls with coffee and doughnuts.

The spring of 1906 a new grandstand was built back of the home plate, and the old one was moved to one side. At the same time a small building was erected for use as a dressing room and for baths.

Provision for track meets was made by a course around the field just inside the fence. Seats in the new grandstand were reserved at a charge of \$1.00 for the season in addition to the admission fee. Seats in the old grandstand were free to ladies, but cost the men ten cents per game. Season tickets for admission to the baseball games were \$1.50 each.

The privilege of using the city square was valuable, but from time to time gratitude for this by students was considerably reduced by the fact that the city fathers allowed carnival companies to use the field. The fenced enclosure was very fine for them, but what they did to the ground was not so fine for the field. In 1907 agitation began with the object of providing a permanent field on College ground. The Board of Regents maintained a committee for study of the possibilities, but progress was slow. There was some thought of purchasing an area south of the campus. In 1909 the committee reported that the area in the southwest corner of the campus was sufficient to permit location of a quarter-mile track. A strong group favored locating the field to the west of the engineering building, but after careful reconsideration the Board voted March 24, 1910, that the land originally selected be established as the athletic field. It was to begin 100 or 150 feet west of Calvin Hall and extend to the west line of the campus, and be 500 or 600 feet wide, "so as to provide for the necessary football and baseball fields, tennis courts, track, etc." Expansion to its present extent was evidently not envisioned by the Board of that period.

The legislature of 1909 appropriated \$5,000 for an athletic field, available in 1910-11, but the expense of creating a field from the area chosen was estimated to be \$10,000. A movement among the alumni was started for the purpose of raising additional funds, and nearly a thousand dollars was subscribed. The *Students' Herald* conducted an active campaign of publicity in the solicitation of money for the field. In the issue for April 23, 1910, a proposed plan of the field was published. As the city was planning to put a school building on the square then used for the College games, it was imperative that the new field be made ready.

The area to be transformed into an athletic field was much higher in the southwest corner than elsewhere, and was traversed by a narrow, winding ditch which carried water much of the time, and the low banks of which were frequently overflowed. Considerable of the land was deemed to be in need of underdraining in order to provide a reliable playing field.

As the project developed and the insufficiency of funds became evident, the preparation of the field at that time was restricted to leveling the area roughly, and excavating a ditch by which any running water flowed along the north edge of the field, rounded the corner, and then continued its way out along the east edge to Anderson Avenue. A concrete culvert bridged the new watercourse at the turn on the northeast. Some surface drainage to this ditch was provided.

The grading of the new field was not completed in time for football, and the games in that sport in 1910 were played on the old field. The new field was first used for baseball the spring of 1911. In the meantime the building used for baths and dressing was moved from the old field and placed near the northeast corner of the new one. It remained there for several years. On its removal it was taken over by the department of entomology and remodeled for use in apiculture, and thus still (1939) serves a useful purpose. The grandstand was also moved and set up near the south side of the field and faced north. The bleachers were moved and placed along the west side.

December 7, 1916, an enthusiastic field day project was put on by the entire body of the students and faculty. Available tools and machinery were employed in grading the field more perfectly, and drainage tiles were laid under the football field which at that time extended east and west. The field then received little further alteration until the west wing of the stadium was constructed in 1922.

The erection of the stadium required that a storm sewer be provided to take care of the water that comes from the northwest.

The intake is west of the stadium, and its underground course is toward the southeast in general, but with some changes of direction made necessary in order to pass between foundation piers of the stadium. This storm sewer connects with the one on Anderson Avenue, which joins the city sewer leading to Wildcat Creek by way of Manhattan Avenue.

BASEBALL

Baseball at the College easily led the sports in interest for many years. This was due to the fact that many of the young men had played the game before coming to College. As it is an open game, it is more easily observed than is football, and thus makes an appeal to spectators who are interested in understanding the game in progress, and not merely in the spectacle of the crowd, and the many accessory features of a modern football game. The baseball teams operated without the assistance of regular coaches until the season of 1905.

For many years, beginning in 1890, a game of baseball between the faculty and the seniors was played as a feature of commencement day. These games furnished amusement to the crowd but were not characterized by athletic skill. Later the commencement game was played between alumni and seniors, and better results were obtained.

The first out-of-town baseball game authorized by the faculty was played May 26, 1894, at Saint Marys with an academy team. The academy won, 21 to 1. Baseball was a favorite sport there, but the team was not allowed to go away for contests.

In 1897 the College team was permitted to play two games away from home. These were with Fort Riley and Kansas Wesleyan University. An article in the *Students' Herald* the next year indicates that the 1897 team was a combination of College and Manhattan players, but that for 1898 only College men would be on the College team. The general body of the students lacked interest, and the season was not satisfactory. The most noticeable feature seems to have been a quarrel in respect to one of the games with the Washburn team.

The baseball season of 1899 was not very faithfully reported in the *Herald*. Interest seemed to be increasing, and "Doc" G. F. Wagner readily collected nickels to pay for balls, and dimes to purchase suits. The band escorted the team to Athletic Park in grand style the day that they first played in their new white suits. Games were played with teams representing the universities of Missouri, Kansas, and Nebraska, and Washburn College. All these

were won by the opponents. A game with Fort Riley was won by forfeit, and a game with a Manhattan team was won.

In 1900, of nine games played, all were lost except one with Kansas Wesleyan University and one with Fort Riley. Three of the games were with the Haskell Indians. The game with "K. U." broke up in a row over a doubtful trick play sustained by the umpire, and the College team forfeited the game. "The Normal played professional league men imported for our game."

The season of 1901 was much more interesting, or the publicity given the games was of higher quality. Student support and the general morale seemed to be good, but the umpire was charged with helping the other side too often. Eleven games were played, of which four were won by the College team. The high points were winning one of the games with Haskell and defeating Highland Park. The team made a tour for games with Haskell, K. U., Washburn, and Saint Mary's, and lost them all. In the K. U. game two of the College players in attempting to field the ball ran into each other and were disabled for the rest of the season.

The season of 1902 developed a few notable features. Of ten games played, five were won, but none was with a strong contender. The game with Bethany was forfeited after a wrangle. "Of all the umpires officiating in a game of baseball, the one at Lindsborg was certainly the rankest and most unfair in the business," was a comment by the *Herald*. Concerning another game, the *Herald* said: "K. S. A. C. met its first defeat this season at the hands of a professional team from Topeka playing under the name of Washburn College." "Three clearly ineligible men" were allowed to play. In spite of such experiences the playing record was not bad, but the end came when the mid-term examinations rendered a large fraction of the team ineligible because of failures in studies, and the team disbanded.

The season of 1903 was the beginning of better things for baseball in the College. A few references appear in the papers to one "Barnett" as being the coach.

The first game played was with the team of the University of Kansas. The College won on a score of 19 to 6, its first baseball victory over the University. The psychological state is of high importance in athletics, and this success set the pitch for the season. In a return game, the K. U. team won, 9 to 1, but in a game with the University of Nebraska, the College won, 5 to 2. Eighteen games had been on the schedule, but the big flood prevented finishing it. Eleven intercollegiate games were played, of which the College won eight. Two games were played with the professional Kansas City Blues, in which the College team was badly outclassed,

and lost, 12 to 0, and 19 to 0. These games were regarded as the best exhibition of baseball ever given in the park.

The *Herald*, March 24, 1904, announced that the baseball team would be coached by R. F. Booth, who had played third base on the Northwestern University team, but in the issue for June 16, Jens Nygaard wrote: "It is very much to be regretted that Mr. Booth was unable to be with us this spring. As it is, the team has been trained by Van Antwerp and Captain Hess. Let us hope that never again may a season pass without a coach for our team." Mr. Van Antwerp was a barber in Manhattan, and a baseball enthusiast who often served as an umpire. The team won four of the ten inter-collegiate games played. The K. U. game was won 7 to 3.

For the season 1905, Reuben F. Booth, then assistant in mathematics, coached the baseball team. Fifteen games were played, and the College team won seven of them. A baseball association was formed including Washburn College, Saint Mary's College, the University of Kansas, the Kansas State Normal School, and Kansas State. The plan was to have each team play two games with each of the others. Additional games were played with these or other teams.

In these contests the College team won a game with K. U., 6 to 4, and lost one, 6 to 1. Two played with Washburn were lost, 8 to 3 and 6 to 1, but a third was won 6 to 4. Of the games with the Normal one was lost 10 to 6, and the other won, 5 to 2. Saint Mary's was the winner in both of the games with her, 3 to 2 and 2 to 1. Altogether a well-matched condition was indicated.

The advent of Mike Ahearn as coach for baseball inaugurated an extraordinary development of talent. Practice started February 13, 1906, and production of new pitchers and a catcher was in view. Nineteen games were played, of which the College team won 13. One of those lost was an exhibition game with the Saint Paul team of the American Association, the score being 22 to 1. College enthusiasm ran high, and the *Herald* printed full accounts of most of the games and at the end of the season a general review with portraits of the team and Coach Ahearn.

In 1907 the baseball team came out in new Yale grey suits trimmed with purple. The coats of regular league pattern were provided by Manhattan business men. A complete outfit of cap, jersey, shirt, coat, pants, stockings, and shoes cost \$32.50. Twenty-one games were played of which seventeen were won. The totals of runs for the season were, K. S. A. C., 127; opponents, 61. One of the games was lost because in addition to the team, they had to meet an "unprincipled umpire" who was the "star player" for the opposition. Similar treatment had been previously received at that

institution. College enthusiasm grew to the point that students met the team at the train when it returned from a trip. The season closed with a sumptuous dinner prepared by the domestic science ladies, and "there were none of the customary toasts, which added much to the enjoyment of the feast."

The season of 1908 was of almost unbroken success. Of the fourteen games played only one was lost, one of the two games with Washburn. One of the games with Saint Mary's ended in a tie score. Two wins from K. U., one from Washburn, and one from Saint Mary's seemed to give the team the most satisfaction.

Out-of-state games of baseball were played for the first time by the Kansas State team in 1909. These were with Highland Park College, Iowa State College, and University of Nebraska teams. The *Herald* reported that the team returned "humbled and almost disgraced." All three games were lost. "It was a sad and disastrous trip and is a great disappointment to the supporters of the Purple Sox."

The season of 1910 brought much joy to Kansas State rooters. Twenty-two games were played, and the College team won all but three—those with Washburn College, University of Arkansas, and a Manhattan league team. The totals of scores for the season were 150 to 49 in favor of the College team.

The spring of 1911 was the last term of coaching by Mike Ahearn. Interest in baseball seemed to be waning somewhat. The *Herald* published no account of some of the games, and no general summary at the end of the season. About nineteen games were played; some of them were under Missouri Valley Conference rules, others under the more liberal Kansas Conference rules. Of the four with K. U. under Missouri Valley rules, Kansas State won two. As far as the *Herald* record shows, all games with other teams but one were won. The team made about fifty per cent more runs than did its opponents.

The games were played on the new athletic field in the southwest corner of the campus. The grandstands, bleachers, and club house were moved from the old grounds on Vattier and Eighth streets in time for the games.

FOOTBALL

A paragraph, apparently written by President Anderson, in the *Industrialist*, October 23, 1875, reads: "Two hundred years ago, when we were a boy, football naturally took the place of baseball as the weather grew colder. Wonder why it doesn't now, and why our boys don't warm up their blood and shins by trying it." Evidently football had not reached the College at that time. The

Industrialist, December 8, 1877, referred to a bone-breaking accident in a game of football at Cedar Vale, and later paragraphs and quotations presented the rough character of the game. The first note found of playing the game at the College, is in the *Industrialist* for November 5, 1887, and reads as follows: "Some thirty students indulged in a game of football on Friday afternoon. It is to be hoped that our students have the good sense to play even football without violence; but the game as sometimes played is next to barbarism. One sprained ankle was carried from the field yesterday."

Football had a prolonged and difficult struggle in winning acceptance at the College as an institutional sport, but in February, 1891, the *Industrialist* noted that two football teams were to be organized and that "the game will be presented according to rule." Some interesting contests were expected. A constitution for a proposed football association was submitted to the faculty February 16, 1891. This was referred to the committee on athletics. The committee reported unfavorably, and the faculty adopted that view. However, at the same time the purchase of a football was approved, and the next October a new one was supplied.

January 25, 1892, "the question of the use of the football for a match game to be played elsewhere than on the College grounds was decided adversely." December 2, 1892, "an interesting game of football between the first- and second-year teams was witnessed by a large number of students at the city park ***." The report in the *Industrialist*, December 3, gives the names of the members of the teams and the position played by each. The score was 4 to 4.

Mr. F. A. Dawley, '95, has some interesting memories concerning football at the College. He states that the beginning of the interest in the sport which grew up in 1891-92 was due to Arthur D. Benson, a first-year student from Colfax, Illinois. He was in College the next year also, and played quarterback in the game of December 2, 1892.

In December, 1893, the faculty voted that "no student shall be excused from College duties to engage in any athletic contest," and that "no body of students shall engage in contests with other than local organizations without the consent of the faculty." In commenting upon this, the *Industrialist* said: "It is understood to discourage all planning of contests in athletic games outside the local associations, where such contests are genuine sport. The maxim of this College, 'Attend to business,' is inconsistent with the excitement and distraction of such contests."

January 15, 1894, "Messrs. Cavanaugh and Jolly raised the query whether the College football team would be allowed to accept a challenge to play the Fort Riley team." A motion to allow

such a contest was lost. It was probably about this time that a celebrated episode occurred in a meeting of the faculty. Discussion had proceeded for some time, and many of the faculty were opposed to anything favorable to promotion of football contests, when Doctor Mayo rose and in his usual smiling and happy manner said that just for curiosity he would like to know how many of the faculty had ever seen a football game. He asked all who had seen one to raise their hands. No one was willing to admit it, and Doctor Mayo nodded his head rather triumphantly and said, "I thought so," and sat down. Professor Walters looked up from his paper and said: "That does not prove anything; one does not have to sound the depths of infamy to know what infamy is!"

October, 1894, two football teams were organized at the College. November 2, the faculty gave a group of students permission "to go to Abilene on Saturday p. m. to play football per arrangement already made." This illustrated the all-too-common tactics of making arrangements first, and getting permission afterward. The Abilene team won 24 to 0. Mr. Dawley recalls that one of the Abilene players was Abram Grant Lott, many years later a brigadier general in the United States army and commandant at Fort Riley.

November 12, 1894, at the faculty meeting "Capt. Cavanaugh presented the request of a number of officers of Fort Riley that the College football team be allowed to play at that place. The football team ask leave to play at St. Marys on Nov. 17 and at Emporia on Thanksgiving Day. Moved by Prof. Popenoe that their requests be granted. Lost." However, the team played a "practice game" with Fort Riley on the assumption that that was not a "contest," and hence not a violation of the faculty rule. The faculty accepted the explanation November 19, and in such cordial spirit that permission was given to the team to play another game with Fort Riley, or one with Saint Mary's.

In 1895 a challenge was received from the football team of Saint Mary's College. This was declined on the ground that the College had no football team. The graduation of the class of 1895 seems to have severely depleted the supply of football interest.

In 1896 President Fairchild, after consulting with some members of the faculty, allowed certain students to play football at Fort Riley on Thanksgiving Day. The College team was defeated by a score of 14 to 0. The students were allowed to play a return game December 5 in which a 6 to 6 score resulted. Doctor Mayo umpired the game, and an interesting account of it was printed in the *Industrialist*. The *Students' Herald* expressed pride in the rec-

ord of the team under the existing conditions and printed a cut showing the group.

The fall of 1897 was in the Will administration. President Will was no more favorable to letting football interfere with scholarship than was President Fairchild. The season was one of considerable controversy. The students obtained permission to organize a football team, but the members were passed upon by the faculty committee on athletics with the provision that none should play who had failed in the mid-term examinations. The faculty also voted "that the use of the College name by athletic teams be strictly confined to College students in good standing." For the first time, a paid coach was employed, W. A. "Jub" Ehrtam, a Baker University athlete. Geo. F. Wagner was manager, and new football uniforms added to the interest. Practice began about October 20.

November 16, 1897, three members of the football team who had played in a contest, although they had failed in some of their mid-term examinations, were suspended for the remainder of the term. Two of the students were granted a rehearing on the 18th, but only rather flimsy excuses were presented, and the faculty confirmed its previous action. On the 19th the committee on athletics was sustained in its view that no student who had been negligent in respect to attendance should be deemed to be in good standing. In a game with the Washburn College team, Washburn won by a score of 36 to 0. The game was played in Topeka. The faculty allowed the team to play Fort Riley at Manhattan on Thanksgiving Day, November 25, 1897.

In 1898 Mr. O. K. Williamson, a University of Kansas star, was employed to coach football. Financial aid had been donated by students and members of the faculty. Coach Williamson was a capable man and expressed disappointment because of the lack of interest shown by students. At the end of the season he attributed the unsatisfactory results to lack of attendance of players at practice games throughout the entire season and to lack of student support. The *Students' Herald* gave ample publicity to the sport, and published a group portrait of the team in connection with a review of the season. Four games were played with outside teams, and one was lost, one won, and two tied.

In 1899 considerably greater interest in football was manifested. The members of the faculty subscribed nearly \$100 toward expenses. The Board of Regents appropriated \$300 to the support of out-door sports, and a dressing room for the team was partitioned off in the armory and supplied with a shower bath and lockers. The team was coached by Albert Hansen, who had played left guard on the team of the University of Nebraska for three

years. He gave the team some hard training and played with it in most of the games. He won the love and respect of the students, and it was hoped that he would return the next year.

The scoring continued to be rather disappointing. Washburn won 24 to 0; Saint Mary's, 23 to 0; and Kansas State Normal, 20 to 0. Kansas Wesleyan was defeated 17 to 5, and the College of Emporia 6 to 0. In the Saint Mary's game, E. I. Durant, of the College team, suffered a broken leg "by the players falling across the leg when his foot was held above the ground." The Saint Mary's team took care of him and paid the expenses until he was able to be brought to Manhattan. This accident had a depressing effect on the situation. The *Herald* noted that faculty interest in the sport was growing and named six members as witnessing one of the games.

In 1900 F. G. Moulton was coach. He was a veteran football player from the team of the University of Kansas, and an all-round athlete. The College team was defeated by the Emporia Normals, 28 to 0, and in a second game, 11 to 0. Ottawa won, 28 to 0, and Saint Mary's, 28 to 6. Kansas State won the game with Kansas Wesleyan, 30 to 0, and was made jubilant by an 11 to 5 victory over the Fairmount College team.

For the Saint Mary's game on Thanksgiving Day the faculty allowed some students with low grades to play. That game was reported to be rather "rough and tumble," and two College players and four of the Saint Mary's team were more or less injured. Coach Moulton played with the team.

The interest in football was becoming such that a few extra men were available to serve as substitutes if necessary, but donations to the expenses of the team were miserly. A comment by the *Students' Herald* was: "Not until there can be free cooperation of both students and College authorities for the support of the cause can K. A. C. ever hope to be successful on the intercollegiate field." There was chafing under application of scholarship standards. " *** It is a shame that the rules regarding players are so strict. *** A man playing football has to attain a higher standard than the average student *** ."

Wade Moore, a University of Kansas athlete, was the football coach for the season of 1901, and his work seemed to please the critics, as the team won several games. One dollar was the price of a season ticket. The game with Bethany College was won by Kansas State on a score of 12 to 5. Coach Moore played with the team and kicked both goals. In a return game, in which Moore also played, Bethany won, 17 to 0. The *Herald* commented: "Although their team is almost entirely composed of star professional players, they did not out-class our own eleven."

The College team won a game played with the College of Emporia, 11 to 0, and in a return game lost by the same score. The Kansas State Normal team defeated the College, 6 to 0. Coach Moore did not play in these games. A sizzling paragraph in the *Herald* indicated bad feeling between the College and the Normal teams.

The coach for 1902 was C. E. Dietz, a product of Northwestern University. He seems to have given excellent satisfaction from all points of view. He taught the principles of clean ball and fair play to more than thirty players. It does not appear that he played with the team in any of the games except the first one with Haskell when Haskell won. The College lost games with Kansas State Normal, 16 to 0; University of Kansas, 16 to 0; Haskell, 23 to 0; Fort Riley, 6 to 0; and Ottawa University, 17 to 0. The team won a second game with Haskell, 24 to 0, and one with the weighty, previously undefeated Chapman team, 22 to 5. The latter game was characterized by the *Herald* as "very exciting," and "the most brutal game that has ever been played in Athletic Park."

Though the Kansas State Normal School won in its game with the College, the *Herald* said: "It is gratifying to know that after all the trouble experienced at the Normal last year, the teams under different management can get together and play a good game without the least trouble."

It was hoped that Coach C. E. Dietz could be obtained again for the season of 1903, but this proved to be impossible, and his brother, G. O. Dietz, also from Northwestern University, was employed by the Athletic Association. Assistant R. F. Booth, of the physics department and a teammate of Mr. Dietz, gave the men some workouts before Coach Dietz arrived, and assisted more or less all through the season. Mr. Dietz left shortly before the close of the season, and Mr. Booth coached the team for its last contest game. Coach Dietz and the *Herald* editor agreed that student enthusiasm was not high for football. The editor suggested that it was because the game was not understood by the student body as a whole.

As reported in the *Herald*, the following games were played with results as stated, the College score being given first in each case: Bethany, 0 to 18; Clyde High School, 11 to 0; Washburn College, 0 to 34; Fort Riley, 11 to 0; College of Emporia, 0 to 11; Kansas State Normal, 0 to 0; and Haskell Institute, 34 to 6.

The season of 1904 started very favorably for football in respect to men, coaching, and quarters, as presented by the *Herald*, which probably reflected student opinion. R. F. Booth, then assistant in mathematics, was coach, and 25 or 30 men were in train-

ing. Quarters for bathing and dressing had been fitted up in the southwest corner of the basement of the agricultural building, now Education Hall. A training table for 16 men was also established. Mr. Booth was the first member of the faculty who was also a regular coach for football, and he seemed to give good satisfaction. M. F. Ahearn, the new foreman of the greenhouses, and an all-round athlete from Massachusetts Agricultural College, coached the second team for a time with marked success.

Games reported by the *Herald* for the season 1904, with scores, were as follows, the College record being stated first in each case: Fort Riley, 20 to 0; Saint Mary's Academy, 5 to 10; Bethany College, 5 to 28; Washburn College, 0 to 56; University of Kansas, 4 to 41; and Kansas State Normal School, first teams, 6 to 34, second teams, 34 to 0. Bad as the record was, the most possible was made of the fact that for the first time in history the College had scored on "K. U." Walter T. Scholz kicked a field goal, the ball being placed by Claude Cunningham.

The domestic science girls started something by giving the football teams a reception and banquet the evening of Thanksgiving Day. The *Herald* printed several articles discussing the football situation in efforts to account for the lack of success in winning games.

June 16, 1905, the Board of Regents voted "that the request of the Athletic Association for Messrs. Ahearn and Melick for coaches of athletics be granted." This was the beginning of better things for athletics. Charles W. Melick was a University of Nebraska man and assistant in dairy husbandry. He had coached track and field athletics at Kansas State College in the spring with great success, and the work of M. Francis Ahearn for a few weeks in football coaching in 1904 was fresh in memory. Professor Hamilton was general manager for the Athletic Association. Carl Mallon was captain of the football team. Five hundred season tickets were sold for the six football games on the home grounds. There was an attendance of more than 700 at the first game.

A new feature was that of excusing students who wished to go to Lawrence to see the game with the University team. Six hundred students and citizens made the trip. The railroad coaches were decorated with royal purple festoons, and enthusiasm was high.

The season was the most successful experienced up to that time. The record of scores, in which the College points are stated first, was given as follows by the *Herald*: Ottawa University, 29 to 0; Washburn College, 5 to 12; Saint Mary's College, 10 to 5; Fairmount College, 11 to 6; Haskell Institute, second team, 60 to 0;

Kansas State Normal School, 10 to 0; Kansas Wesleyan University, 24 to 0; University of Kansas, 0 to 28; Kansas State Normal School, second teams, 38 to 0. The College teams scored 187 points, and their opponents, 51. The *Industrialist* comment was: "Coach Ahearn made a splendid record. He developed the best team the agriculturists have ever had on the gridiron. He will be retained as coach of baseball in the spring and for football next fall. Athletic spirit runs high at the College, and good teams with good support will be in shape the coming spring and fall."

It was reported that in this country twenty men lost their lives through injuries received in playing football during the season of 1905. Of these, three were college men. The Board of Regents adopted the following resolution: "Resolved, that we endorse the movements now on foot to modify the rules of football to make the game less brutal and dangerous." In an article on the new rules announced in the spring of 1906, the *Herald* stated that the supporters of the open game had gained their point, and that hereafter speed will be a necessary qualification for a football player. The invention of many new plays was predicted.

"Mike" Ahearn again coached football in 1906. The season was a successful one, and included one game that made the year imperishable in the history of Kansas State athletics. Carl Mallon made the first touchdown for the College against "K. U." on November 24, 1906. The *Herald* said in part: "Mallon certainly ended his football career here in a blaze of glory. He played a splendid game both on defense and offense, and he did all the scoring *** Mallon picked up the ball and carried it for the winning score. He also kicked goal."

The staid *Industrialist* said: "The victory of the College over the State University on the gridiron yesterday brought forth an enthusiasm among our students and citizens that was without parallel in the history of the institution; all the more because it had been a clean game from start to finish. The streets were thronged in the evening with shouting students, a bonfire was lighted, the College bell rang, speeches were made—all felt that it was a famous victory. The attendance at the game was over 1,500."

The good-tempered rivalry in athletics which exists between the University of Kansas and Kansas State College had its origin at a time when the inferiority complex of the latter institution in respect to sports was painfully evident. Mallon's historic touchdown probably gave more pleasure per capita to Kansas State students and fans than any made since. The importance attached to winning in athletic contests between representatives of educational

institutions is a psychological phenomenon which may be readily observed, but is difficult to understand.

The *Herald* gave the scoring results of the 1906 season as follows, the College points being stated first: Haskell Institute, 10 to 5; College of Emporia, 35 to 0; Washburn College, 4 to 5; Fairmount College, 6 to 12; Ottawa University, 32 to 11; University of Kansas, 6 to 4; and Kansas State Normal School, 10 to 0.

With the growing success in football, interest increased, and Coach Ahearn introduced spring practice in 1907. This was under Captain Montgomery, as Mr. Ahearn was busy with the baseball coaching. Interest was also promoted by using a College assembly meeting for the presentation of sweaters to the members of the 1906 team who had played in a sufficient number of games. The sweaters were white and bore the then recently adopted official College emblem, a large block letter purple "K."

In the season of 1907 the College team won five games and lost three. The totals of the scores were 135 to 56 in favor of Kansas State. Haskell won 10 to 0, and Washburn College and the University of Kansas, the choicest rivals of the College, were the other two winners. With those two winning, the Kansas State team could not feel that the season was wholly successful. William Davis, who later became general secretary of the College Young Men's Christian Association, coached the second team.

In January, 1908, the Board of Regents took action which limited away-from-home athletic contests to five football games and six baseball games, and to not more than two consecutive college days per trip.

For the season of 1908 the Athletic Association provided for a training table. At first the team boarded at the Young Men's Christian Association, but in a few weeks it was transferred to a private boardinghouse conducted by Mrs. Emil Thoes. Here the men paid for regular board at \$3.00 a week, and the Athletic Association added \$1.50 a week to this in order to insure an ample supply of the most digestible and nourishing food. The results were regarded as very satisfactory by Coach Ahearn. Most of the men gained significantly in weight.

The team won six games and lost two. The totals of the scores were 164 to 74. The team from the University of Oklahoma inflicted a smothering score of 33 to 4. "K. U." was the other winner 12 to 6. The wounds of these defeats were healed, though not without scars, by the game with Washburn which Kansas State won 23 to 4. This was the first football victory over Washburn, and the *Herald* announced it in a very black headline "The Hoodoo Broken." The glory was somewhat reduced by the fact that five

or six other teams also won over Washburn that season. The game was played on the Washburn field, and a full day's vacation at Kansas State was allowed, and 500 rooters and the band made a trip down by two special trains, on the Union Pacific and the Rock Island railways. The latter made the trip from Manhattan to the Topeka yards in 59 minutes.

This year marked a step in athletic development in that for the first time the College football team played a game outside the State of Kansas. This was with the team of Creighton University, Omaha, and was won, 13 to 0, greatly to the surprise of the Omaha fans.

Early in 1909 it was announced that the first football game with the team of the University of Missouri would be played at Columbia on October 10, 1909. This was the second out-of-state game of football for the College. Missouri won, 3 to 0. A game with Creighton University was won by the College, 58 to 3. The College won all its seven games excepting the one with "K. U." which it lost, 3 to 5. The totals of scores were: Kansas State, 320; opponents, 11.

This record of overwhelming strength showed that the College was not playing opponents that possessed the strength necessary to insure interesting competition. Membership in the Missouri Valley Conference began to seem desirable. Another fact shown was the splendid ability of Mike Ahearn as a coach, not only of football, but of baseball and basketball. A rather positive statement by Coach Ahearn that he would not coach the next year created nothing less than melancholy and consternation among the students. However, after due effort had been made, Mike was persuaded to continue to coach with the understanding that 1910 would be his last year.

The football number of the *Students' Herald*, December 21, 1910, included a fine portrait of the coach, Michael F. Ahearn, with a jocular biography. The season had been very successful for the Kansas State team. Of the eleven games played, all but one were won. The Colorado College team on its home grounds won by a score of 15 to 8. The totals of scores were 337 to 31. The victory most prized was that over Washburn, the score being 33 to 0. There were no games with Missouri Valley Conference teams, and it was very evident that the teams which the College team met were much too greatly outclassed. Admission to the Missouri Valley Conference became a much discussed project, but this was not attained until 1913.

BASKETBALL

Basketball was first played on the campus by young women. This was the spring of 1901. An exciting contest out-of-doors took place May 25, 1901, between the "Purples" and the "Reds." This was the first public basketball contest at the College and was witnessed by several hundred persons. The Purple team consisted of Frances McCreary, captain, Gussie Griffing, Bessie Mudge, Cora Baird, and Mable Stevens. The Reds were Anna Summers, captain, Myrtle Toothaker, Esther Hanson, Laura Ware, and Olive Dunlap. The Purples won, 9 to 2. Miss Gertrude Williams, director of physical training, was umpire.

The young women played in their gymnasium, and it was announced that they would play no more out-of-doors games, and that only immediate friends and relatives would be allowed to witness the games. Interclass contests were conducted by them, and the first-year girls also contended with the woman members of the faculty. The girls won 46 to 4. November, 1902, the young women requested permission to play intercollegiate games, but, on a close vote, the faculty declined to allow this.

For one or more periods groups of members of the faculty were allowed the use of the women's gymnasium for basketball. Blacked eyes and other casualties, and possibly other considerations, prevented any excessive development of the sport in the faculty.

The first basketball game played by young men of the College was between teams representing the cabinets and the secretaries of the Young Men's Christian Association. Professor Hamilton was referee, and the game was played November 29, 1901. Interest in the sport grew during the winter 1901-02. Games were played in the drill hall of the armory. The next winter the stock judging room in the barn was secured for a practice room which was much superior to the armory.

The first intercollegiate basketball game at the College was played in the barn, January 16, 1903, with a Haskell team as the opponents. The *Herald* reported that " *** with our boys, breath was at a premium, and they exhibited neither the speed nor the skill of their dusky competitors. *** " The score was 60 to 7 in favor of Haskell.

Following timeworn tactics, the team arranged for a game with Washburn without obtaining authorization from the faculty. In its usual spirit of cooperation the faculty permitted the engagement to be carried out, but voted that thereafter basketball would be on the same footing as other intercollegiate athletics, and that the permission of the faculty must be obtained before planning

games. In games with Bethany, McPherson, and Baker, the winter of 1903, the College got the short end of all the scores.

Probably because of the lack of a suitable place for playing, basketball made little headway during 1904 and 1905. In January, 1906, the Commercial Club of Manhattan gave the students the use of their hall for practice and contests. Mr. C. W. Melick, assistant in dairy husbandry, coached the men, and a schedule of games was arranged by Prof. Geo. A. Dean, general manager. Six games were played with college teams, five in a high-school tournament, two with Fort Riley, one with the faculty, and one with a team selected by Mike Ahearn. The College team won about one third of the games. Out-of-town intercollegiate games were played with Kansas State Normal and Washburn. At the end of the season the college letter was awarded to men who had played in six or more games. These were Frank E. Ferris, C. H. Carr, Charles Cain, C. F. Blake, and C. T. Topping.

In 1907 eleven games of basketball were played with teams from other colleges. For the first time the University of Missouri met Kansas State in an athletic contest, and she lost by a score of 39 to 19. The College won six out of the eleven games played. Out-of-town games with Haskell, Baker, and Ottawa were lost. The sport was now securely placed as a feature of the intercollegiate athletics of the institution. M. F. Ahearn coached the team in 1907 and for four years thereafter. Kansas State teams fluctuated a good deal in their degree of success with this sport.

For the season 1908 the Athletic Association leased the Young Men's Christian Association gymnasium for basketball practice and contest games, and continued such use until the new gymnasium was occupied. Nichols Gymnasium was first used for the season of 1911-12.

Through later years basketball has attained considerable popularity, but the lack of sufficient space in the gymnasium for spectators is against the development of great popular local interest. In the opinion of the writer the game as played should not be promoted as a college sport, for the reason that the contests are conducted in the evenings when students should be engaged in study. Furthermore, the spectators do not receive the benefits that come from attending games in the open air.

TRACK

Rather sustained interest in track sports was maintained, though with more or less fluctuation in respect to records made. Much depended upon whether outstanding performers happened to be in attendance. In the earlier years Prof. J. O. Hamilton contributed

much toward the success of meets. A field day program was carried out in the city park, June 1, 1896. The winners and the records made in the twelve events were:

W. A. Cavanaugh, 100-yard dash, 11½ seconds
 F. V. Dial, pole vault, 7 feet, 11½ inches
 N. M. Green, baseball throw, 326 feet, 10 inches
 W. A. Cavanaugh, standing broad jump, 11 feet, 5 inches
 F. V. Dial, running broad jump, 17 feet, ½ inch
 H. G. Johnson, hammer throw, 67 feet, 7 inches
 Philip Fox, 220-yard dash, 25 seconds
 O. E. Noble, 440-yard run, 60 seconds
 W. A. Cavanaugh, shot put, 31 feet, 2½ inches
 F. V. Dial, half-mile race, 2 minutes, 21 seconds
 W. A. Cavanaugh, running high jump, 4 feet, 11½ inches
 Third years, R. H. Brown, Philip Fox, F. V. Dial, and O. E. Noble, mile relay race, 4 minutes, 21 seconds.
 Dr. N. S. Mayo was referee; M. Kirkpatrick, scorer; and W. B. Henson, timekeeper.

Field days were held annually up to 1901. None was promoted in 1902, and in 1903 the flood rendered elaborate preparations useless. From 1904, contests in one form or another seem to have been held every year. Assistant C. W. Melick coached track in 1905 and 1906. B. R. Ward, instructor in English, coached in 1907; William Davis, secretary of the Young Men's Christian Association, coached in 1908; and John B. Whelan, instructor in chemistry, during the years 1909 to 1912. "Cap" Will C. Bryan coached in 1913, and Carl J. Werner, 1914 to 1916.

Many of the track and field contests were among class teams. Gradually state meets were arranged. By 1913-14 these were under Missouri Valley regulations. The diversity and great number of events in a meet make it impracticable to summarize performance or progress in this group of sports.

TENNIS

In the earlier period of athletics at Kansas State College more interest in tennis was shown by members of the faculty than by students. The importance of good surfacing of courts, and the expense of their construction and maintenance, and the rather high cost for individual equipment were against the extensive private development of the sport which would naturally precede public provision for it. Several private courts were established.

The *Students' Herald* for May 3, 1900, recorded that "a tennis court is undergoing the process of construction on the campus. ***"

In 1907 the *Herald* asked "Why can't we have a number of new tennis courts on the campus? We have only two at present, and the ground occupied by them will soon be used for new buildings. Other schools have from five to ten courts maintained by the school. Why can't we be treated likewise?"

A beginning of the present group of courts was made when three or four were constructed on the terraces west of Nichols Gymnasium in 1916. The extensive use made of these courts shows that there are many devotees of the game even though it may rank only as a minor sport.

LATER CONDITIONS

When Nichols Gymnasium became available and athletic fields were created on the campus, and a somewhat adequate instructional staff employed, the management of intercollegiate athletics was simplified and systematized. Membership in the Missouri Valley Conference added to the challenge to fitting teams for contests, and employment of professional officials greatly reduced dissatisfaction with decisions and charges of "dirty" playing.

The gradually stabilized management of the *Collegian*, adequate summaries in Royal Purple, and reports in the *Industrialist* and the Manhattan newspapers have preserved a good continuous record in respect to athletics since 1911, but much labor would be required to assemble this in definite form and moderate volume. To do so is not in the present plan.

PHYSICAL TRAINING FOR WOMEN

In respect to physical training that leads to wholesome, symmetrical development, good posture, and fine carriage, through calisthenics and gymnastics rather than contests in sports, young women of the College have excelled the young men. This may be due to their instinct to attain physical appearance of maximum beauty, to appreciation of sound health as a factor, and to a stronger sense of rhythm, and greater pleasure in its expression.

Aside from the practice in calisthenics in which all students participated during the Denison administration, the first regular work in physical training for girls was given to volunteer students in 1892-93 under the instruction of Miss Minnie Reed, who was a graduate student. The work done included marching, military setting-up exercises, Swedish movements, exercises with dumbbells and clubs, and free exercises. Work of similar character was given through succeeding years by Misses Bessie Belle Little, Bertha S. Kimball, and Mary E. Lyman.

In October, 1897, physical training for women was placed in

charge of Mrs. Winnifrede W. Metcalf, who with her husband, Prof. F. A. Metcalf, regarded physical training as vitally connected with public speaking and dramatics. Mrs. Metcalf was made instructor in oratory and calisthenics, and a member of the faculty for the year 1898-99.

In July, 1899, physical training was made a requirement for freshman and sophomore young women. Miss Florence Ball was elected director of physical training, and served until her death December 9, 1900. Her successors were Gertrude Williams, 1901; Edith N. Clure, 1901 to 1903; Estella M. Fearon, 1903-04; Marguerite E. Barbour, 1904 to 1910; and Blanche E. Enyart, 1910 to 1913; and others.

After the burning of the chemistry building May 31, 1900, Miss Ball proposed that it be rebuilt for use as a gymnasium for the young women. At that time a large room on the south side of the basement of Fairchild Hall was being used for that purpose, and previous to 1894, the work had been given in the southwest corner of the basement of Anderson Hall. The legislature of 1901 appropriated \$5,000 to rebuild the chemistry building with such changes in the plan as were advisable to adapt it to use as a gymnasium. It served this purpose very well until the completion of Nichols Gymnasium, in 1911, when physical training for young women was transferred to that building.

The curricula in physical education were adopted April 30, 1925, and the freshman year was offered the next fall. Succeeding years were provided for as the students advanced. These curricula not only added to the opportunities for students but made positions on the staff more attractive. Throughout the department the personnel has been of high quality, largely through this influence.

THE ALUMNI ASSOCIATION

The quality of a sketch of the organization, growth, projects and accomplishments of the Alumni Association is greatly impaired by the fact that some of the secretaries of the Association neglected to hand to their successors the records that were in their possession. Such carelessness is very irritating to any historian, and the fact that it is so frequently exhibited by educated and, presumably, trustworthy persons accentuates the irritation. For facts previous to 1915 one is obliged to depend on such imperfect reports as were published in the *Industrialist*, *Herald*, *Collegian*, or local newspapers. This lack of a sense of responsibility is not peculiar to the secretaries of the Alumni Association, but has been exhibited by the officers of other College organizations also, with corresponding additions to the archives consigned to oblivion.

The commencement program for 1874 included provision for a meeting of the alumni, Wednesday evening, June 24. A newspaper paragraph indicates that an alumni association was in existence. Another refers to this occasion as "the first annual meeting of the Alumni Association of the Kansas State Agricultural College of a public character ***." A correspondent of the *Manhattan Beacon* reported that "President Anderson refused the Alumni Association the right to meet as a society in the College unless they should promise that at their annual meeting, June 24th, nothing should be said contrary to, or that might be interpreted as contrary to, the present administration ***." Whatever the truth may be in that connection, the meeting was held in the Presbyterian Church, and there was a very large audience. Both of the local papers, the *Beacon* and the *Nationalist*, published favorable reports on the program. "C. F. W." in the *Nationalist* wrote that "the pleasantest affair of the evening was the presentation to Doctor Denison of a silver ice-pitcher, salver, goblet and slop-bowl by the students who were so long under his care. There was the best of feeling throughout the evening. The music was good, especially the genuine College song."

ORGANIZING THE ASSOCIATION

The class of 1879, soon after graduation, took steps in the direction of an organization of the alumni, and elected officers as follows: G. H. Failyer, '77, president; A. N. Godfrey, '78, vice-president; H. C. Rushmore, '79, secretary, and A. T. Blain, '79, treasurer. No public meeting was held the next year, but alumni met in the library and adopted a constitution, and elected the same persons as officers, with the addition of N. A. Richardson, '80, as marshal.

For the reunion in 1881 the officers arranged to have a banquet and an address by Mr. W. D. Gilbert of the class of 1874. On account of illness Mr. Gilbert was unable to fulfill the engagement. About 80 persons participated in the banquet.

Wednesday afternoon, June 7, 1882, President and Mrs. Fairchild opened their home and received the greetings of alumni, students and friends. In the evening a banquet was held which was well attended. Lieutenant Albert Todd presided as master of ceremonies. The members of the Board of Regents were guests.

In 1883 a public address under the auspices of the Alumni Association was delivered by John J. Points, '67. Governor Glick and former Professor Gale were guests upon the stage. The governor also made a few remarks. A reception was held in the College parlor for members of the Association and their guests. This was

followed by a banquet in the new drawing room in the central part of Anderson Hall. At the banquet Miss Alice Stewart, '75, read an excellent history of the association. Several alumni responded to toasts, Rev. A. J. White acting as toastmaster.

The reunion of 1884 was very satisfying. W. D. Gilbert, '74, gave an excellent address, and the banquet in the drawing room was prepared and served by the domestic science class under the direction of Mrs. Kedzie. There were 85 participants, and the after-dinner speeches were of an unusually high order of excellence. However, the association decided to have the reunions with addresses and banquets triennially, and to have only business meetings annually. This plan continued until 1908.

TRIENNIAL REUNIONS

The first triennial reunion was held June 8, 1887. The address was given by Albert Todd, Lieutenant in the First United States Artillery. No definite subject was named in the report, but he spoke upon what the past years had done for the graduates of the College. The banquet was served in Armory Hall. The toastmaster was H. C. Rushmore, and responses were made to a series of toasts. Mrs. Bowen, '67, read a history of the life and work of some of the alumni who were graduated before 1881. A song composed by Miss Emma Glossop, '83, was sung.

The later triennial reunions were similar in character. The number of alumni available as public speakers increased continuously, and the addresses given were of a high degree of excellence. They were as follows:

1890, Marion F. Leasure, '77, Evolution of Thought.

1893, Samuel W. Williston, '72, The Past, Present, and Future of the Agricultural College.

1896, Frederick J. Rogers, '85, The Position of the Sciences in the Activities of Life.

1899, John W. Shartel, '84, The Relation of the American Constitution to the Modern Trust.

1902, Nellie Sawyer Kedzie Jones, '76, A Balanced Education.

1905, Frank A. Waugh, '91, Horace Greeley Down to Date.

1908, Ernest F. Nichols, '88, Recent Discoveries in Physical Science.

It is no disparagement of the other addresses to state that that of Professor Nichols was one of the most brilliant ever given at the College on any program. It was printed in full in the *Industrialist* and also issued as a pamphlet. It was the last of the alumni addresses and was a fitting climax to the series.

SPECIAL REUNIONS

Whether reunions at the College were simple or formal, the chief burden of planning and conducting them has necessarily always been upon the alumni residing in or near Manhattan, and especially upon those connected with the College. In 1897 when President Fairchild and so many others were separated from the institution, the resident alumni arranged for a reception in honor of the outgoing members of the faculty, as it was not a year for the regular triennial reunion. The program was carried out in Fairchild Hall June 10, with social greetings and refreshments early in the evening, and speaking in one of the society rooms later. Sam Kimble, '73, gave a fitting address of some length, and responses were made by outgoing College officers, concluding with President Fairchild's farewell talk.

At the business meeting of nearly 300 of the Alumni Association, the afternoon of June 10, 1897, resolutions of considerable length were passed which condemned the action of the Board of Regents in removing President Fairchild and other members of the faculty; urged naming of one or more alumni to membership on the Board; and advocated the appointment of Regents in such a way as to minimize political considerations. The next day, by a vote divided on party lines, the Board passed some hot resolutions alleging that "under the guise of the annual meeting" a number of Republicans had met "for purely political purposes." The Board directed the president and the faculty to "hereafter keep the College chapel and halls free from all partisan political meetings."

The commencement day program in 1898 carried a line announcing a business meeting of the alumni at 5 p. m., June 9th, but the *Industrialist* did not print a report of the proceedings. The alumni at meetings held when there was not a triennial reunion do not seem to have transacted much business of permanent value.

As the number of the alumni increased, those present at commencement became more numerous each year, and the need of provision for social meetings for the years not covered by the triennial reunions became quite evident. In 1903 the faculty designated the Wednesday preceding Commencement Day to be Alumni Day. Local alumni in cooperation with the executive committee of the Alumni Association provided for reunions in 1903, 1904 and 1906.

April 15, 1907, the resident alumni organized the Manhattan Alumni Association, a large part of the object of which was to provide a continuing body which should offer a reception annually to the visiting alumni and friends. These occasions were not elaborately staged, serving chiefly as rallying points where friends might

count on meeting each other. The Manhattan Association provided these receptions to 1923, inclusive.

ALUMNI DINNERS

The first commencement week of the Waters administration in 1910 was an off year in respect to reunions of the alumni. President Waters was interested in establishing the practice of having a College dinner annually immediately after the commencement program. He wished this to be in charge of the Alumni Association. Accordingly he appointed a committee of alumni from the faculty, with Professor Dickens as chairman, to make arrangements for a noon luncheon. This was served in the women's gymnasium and attended by a large number of the members of the Board of Regents, faculty, alumni and guests.

A noon luncheon was also served in the women's gymnasium in 1911, but from 1912 to 1917 they were given in Nichols Gymnasium. These luncheons were always accompanied by speeches, and the gymnasium was an insurmountable obstacle for most speakers. On that account the event fell off greatly in patronage. In 1918 an innovation was made by having a luncheon served in the judging pavilion in cafeteria style. There was an abundance of good food, and ample opportunity to renew acquaintance and meet friends. There were no speeches, but the guests were invited to follow Dean Potter to the engineering departments and see the enlisted men under instruction.

After the close of the war the department of shop practice continued the operation of the mess hall that had been used with the Students Army Training Corps. This was especially for the convenience of workmen, and students who were economizing as much as possible, but the chef at various times put on specially ordered dinners and luncheons. From 1919 to 1922, the alumni-senior luncheon was served in the barracks, and the arrangement gave general satisfaction. In 1923 the College cafeteria was in full operation, and the luncheon was given there to about 400 alumni and guests.

In 1924 the noon luncheon Commencement Day was displaced by an elaborate banquet the evening of Alumni Day, May 28, in which more than 500 participated. Loud speakers installed by the department of physics amplified the voices of the speakers so that the toasts added to the pleasure of the occasion instead of being a bore to be endured. A regular public address system was provided first in 1925, and has been available since that date.

After the banquet a mixer was held for alumni, seniors, and members of the faculty. Both features of the reunion took place

in Nichols Gymnasium. All the arrangements were in charge of the officers of the Alumni Association. Similar events have been provided each year since, provision for dancing being included in more recent years. The executive secretary of the association takes charge of all arrangements and through efficient committees provides each year most enjoyable programs and facilities for reunions.

FINANCING THE ASSOCIATION

Financial support for the Alumni Association was very precarious for many years. At first it was difficult to collect enough to cover the expenses for banquets, and treasurers were sometimes left "holding the sack." Later an attempt was made to collect twenty-five cents annually from such as were accessible. Throughout this period all graduates were on the same level, and there was strong opposition to making any distinctions.

The beginning of a business-like attitude was made June 14, 1916, when the Association adopted the suggestion of Henry C. Rushmore, '79, that annual dues in the Association be fixed at one dollar, and that life membership be obtained by payment of 20 dollars. The plan included investment of the life membership payments at five per cent per annum, thus providing one dollar, the amount of the annual dues. It was suggested that the life membership fund might constitute a loan fund for students, though investment was not limited to that channel. Receipts of interest were expected to provide sufficient funds to meet the general expenses of the Association. Banquet tickets would continue to be paid for by the individuals using them, unless they were guests of the Association. As soon as such an endowment fund was created, incorporation of the Association became necessary in order to enable it to enforce collection of loans.

The constitution adopted placed the control of the Association between meetings in the board of directors, and provided for continuation of the advisory council which had been established at least as early as 1915.

EMPLOYMENT OF A PAID SECRETARY

Many of the alumni had recognized that effective service by the Alumni Association demanded the employment of a paid secretary who should be the executive spear head of the board of directors. At the business meeting in 1917 a motion was made to instruct the board to employ a secretary, but the absence of a financial basis to support such an action was realized and the motion was laid on the table.

In the spring of 1920 on the initiative of Waldo E. Grimes, '13,

the project of maintaining a paid executive secretary was again broached. At the annual meeting of the Association in June, a committee consisting of Mr. Grimes, chairman, Albert Dickens, '93, and Rena Faubion, '10, was appointed to promote the enterprise. The campaign was opened by having a meeting of local alumni, followed by a canvass of all residing in or near Manhattan. Subscriptions of five dollars or more were solicited from each.

The committee then sent a circular letter to each graduate in which the objective was stated and similar donations requested. This was something of a shock to those who were accustomed to expecting dear old Alma Mater to keep on doing things for them with no reciprocal response, but 532 made contributions totaling \$2,843.50. A follow-up letter was sent to the others and 273 more donated \$1,359.25. The whole amount given by 825 alumni was \$4,202.75 up to April 23, 1921.

The board of directors prepared amendments to the constitution of the Association, which were designed to give permanence to this project, provide financial support, and place the control of the organization in the hands of those who maintained its enterprises. These amendments were adopted June 1, 1921, by the Association. They provided that all upon whom degrees had been conferred by the College should be members of the Association, but within that basic membership one might become an active, life, or sustaining member, by compliance with certain requirements, and voting power was limited to such members. It was held that those who supply the money should control its expenditure.

At that time to become an active member required payment of \$5 a year, and a payment of \$100 was necessary to the purchase of a life membership. One who gave more than the sum required by his classification was designated as a sustaining member. May 27, 1925, the Association amended the constitution again so as to provide for active membership for life on payment of \$50, and that when a husband and wife are both alumni of the College, and one is a life member, the other may become so on payment of \$25. Payment of \$100 constitutes one a sustaining member, and \$250 an endowment member for life.

For many years it had been the practice of the College to send the *Industrialist* free of charge to all alumni. The paper constitutes to a certain extent an alumni journal and while it functions in that capacity financing a distinctively alumni publication is difficult, and attempts to do so made by sponsors for the *Jayhawker* and the *Alumnus* failed. After much discussion through several years, a plan was adopted by which Alumni Association support was linked with the *Industrialist*. The furnishing of the paper to

all graduates had become a heavy burden to the College, and this made cooperation with the Association in restricting distribution to active members an acceptable proposal. March 25, 1927, the directors voted to recommend to President Farrell that free provision of the *Industrialist* to alumni be confined to one year following graduation, and that it be sent to alumni of more than one year's standing only if they had become active members of the Association. This was approved by President Farrell, but before putting it into effect, the annual fee for active membership was to be reduced to three dollars. This plan was approved by the Association June 1, and the constitution amended to make the annual dues three dollars, effective July 1, 1927.

Parallel to this change was an increase of the interest rate on loans to 6%, so that the \$50 paid for life membership would yield the annual dues for active membership.

Clifton J. Stratton, '11, by action of the Board of Regents September 14, 1920, was appointed to be in charge of alumni and student relations, effective September 13. The directors of the Alumni Association gave him the title executive secretary, an office independent of that of the secretaryship of the board of directors. Seven eighths of Mr. Stratton's salary was paid by the College, and alumni funds were available for the remainder, and for office expenses. Mr. Stratton was given an office in Anderson Hall across from the post office. Later, he was given quarters in the west part of Illustrations Hall. Mr. Stratton contributed valuable service in several lines, prominent among which was in connection with the organization of the Stadium Corporation, and the inauguration of the campaign for funds to build the stadium. He resigned, effective May 31, 1922.

Mr. Oley W. Weaver, '11, succeeded Mr. Stratton as alumni executive secretary. He began service July 16, 1922, and resigned, effective March 8, 1924. At first his salary was paid entirely by the Association but later, because of services rendered, a large fraction was paid by the Stadium Corporation. Under his administration a directory of the alumni was prepared. It was issued February 1, 1923, and was much needed as the Alumni Record was issued in 1914.

Ralph L. Foster was elected executive secretary, April 18, 1924, and took up the duties of the office May 16, 1924. He served until August 21, 1928. Much constructive work was done during his incumbency in line with a program presented by him and W. E. Grimes, president of the Association, in October, 1924. This included supporting the legislative program of the College, promoting the sale of life memberships, and thus improving the financial

basis of the Association, and a plan for a reunion of each class at five-year intervals from the year of graduation.

After consideration of several persons, the directors, August 29, 1928, empowered a committee consisting of Ralph Snyder, '90, W. E. Grimes, '13, and R. A. Seaton, '04, to employ an executive secretary. This committee selected Kenney L. Ford, '24, and he took office November 1, 1928, and is still performing with increasing effectiveness the duties of his position.

During sessions of the legislature, Secretary Ford, under direction of President Farrell, makes contacts with senators and representatives and explains the needs of the College as indicated by requests for legislation submitted by the Board of Regents.

Under authorization by the directors Mr. Ford has attended meetings of alumni secretaries, and has made extended trips covering much of the United States for the purpose of meeting groups of alumni and stimulating their interest in the College. Reels of motion pictures prepared for the purpose have added greatly to the effectiveness of these contacts.

Management of the alumni reunion and banquet commencement week, a founders' day program February 16 each year, luncheon facilities for alumni farm and home week, and caring for special campus events are among the other activities of the alumni secretary.

Alumni interest has been created and preserved to such an extent that paid-up life membership enrollments now amount to 965, and about 700 pledges are in process of payment. A gratifying number of alumni who have not become life members pay the annual dues of active members. Space is not available for presenting a complete picture of the work of the alumni secretary, but it is of high value to the College and adds greatly to the satisfaction of alumni. In addition to his own plans or special activities the secretary is the executive through whom the projects undertaken on the initiative of the directors are carried out.

ALUMNI SERVICE

While there are numerous opportunities for alumni to render service to the College through various channels, continuous organized strength and readiness of the alumni through their Association rests fundamentally on the project of the life membership endowment fund which is used as a loan fund for students. Assistance to worthy students is an objective which appeals to thousands who would not care to contribute to a fund that should function only as an endowment of the association.

A loan fund committee was first appointed in 1917. The ad-

ministration of awarding loans and collecting the interest and principal was placed on a definite business basis, which with some improvements has been found adequate to conserve the fund almost completely. Any losses are restored through a reserve from the interest received. In this way those taking life memberships are assured in respect to the perpetuity of their benefactions. June 30, 1939, the life membership fund amounted to about \$72,000.

In more recent years the loan funds of the Association have been considerably augmented by special contributions. Some of these have been created as memorials to, or in honor of certain persons; these are: Albert Dickens, '93, \$1,912.70; J. M. Westgate, '97, \$1,250; J. Chester Allen, '82, \$1,000; Frances M. Allen, \$1,000; Nellie S. Kedzie Jones, '76, \$801.60; Samuel and Eleanor Thackrey, \$696.75; Kary C. Davis, '91, \$500; Lydia Gardiner Willard, \$500; Venus Kimble Wilson, '08, \$400; Clara F. Castle, '94, \$100; Jacob Lund, '83, \$70; Charles H. Stiles, '81, \$50; E. C. Trembly, '95, \$50; Ethel Arnold, '18, \$26.

Contributions have also been made by: Vilona Cutler, '17, \$1,000; John U. Higinbotham, '86, and Mrs. Higinbotham, \$1,000; Albert Deitz, '85, \$100 and interest; E. A. Allen, '87, \$100; Manhattan Chamber of Commerce, \$3,023.72; Collegiate 4-H Club, approximately \$1,500; Cosmopolitan Club, \$700; Klod and Kernel Klub, \$200; friends of Future Farmers, \$180; Phi Kappa Phi, \$150; Sigma Delta Chi, \$150; and an architectural group, \$20.

Residues of funds have been donated by certain classes: Class of 1916, \$100; 1919, \$622.47; 1922, \$106.39; 1923, \$76.16; 1926, \$9.13; 1927, \$3.10.

Some other classes have left contributions to a chimes fund to be used as loan funds while money is accumulating for chimes. Class of 1929, \$674.12; 1930, \$647.30; 1931, \$592.38; 1932, \$647.37; 1935, \$57.50; and 1936, \$111.50.

The Agricultural Fair Board has left as a temporary loan, \$850. Some of the funds named above are restricted in respect to their use. In most cases they have been contributed by relatives or friends of the persons honored.

The memorials to Frances M. Allen, and J. C. Allen, '82, were given by E. A. Allen, '87, in honor of his wife and his brother. The \$100 listed with his own name was given in recognition of the fiftieth anniversary of his graduation.

The successful management of the alumni loan funds has been recognized in an arrangement that applications for loans from other funds shall go through the office of the alumni secretary. This also enables a certain check to be kept on the extent to which indebtedness is being incurred by borrowers.

The oldest of the loan funds was founded by President Waters by the donation of the royalties which he received on the sales in Kansas for the first five years after publication of his high school textbook *The Essentials of Agriculture*. Augmented by interest and gifts from others this fund now amounts to more than \$5,000.

The Fannie J. Hamilton fund of \$6,000 was bequeathed by Professor John Orr Hamilton as a memorial to Mrs. Hamilton. Belle Selby Curtice, '82, gave \$1,000 to be available for loans to students of home economics. Several other gifts and deposits are also administered with these by the committee in charge of the Waters fund.

The directors of the Alumni Association have undertaken several projects which did not mature into success. These need not be reviewed here. Partial success has attended efforts to create subsidiary organizations. For some years the formation of county clubs in Kansas was a major objective, which has not been completely abandoned yet, but there are few such clubs in active operation. In counties with populous cities such organizations should be feasible. Success in any such movement depends upon the presence of one or more enthusiastic alumni who will furnish the organizing, pulling and driving power.

The most effective force in respect to maintenance of life and activity in a club is an adequate objective. Some worthy project in the support of which members of many classes may unite is more effective than an opportunity for mere gratification of the gregarious instinct, or the impulse to meet former classmates, of whom only a few may reside in the area covered by the club. Local associations of long standing are maintained more or less successfully by force of numbers in Los Angeles, Denver, Chicago, Washington, New York City, Pittsburgh, Kansas City, Philadelphia, and Boston.

In many localities a group may be convened readily to meet the alumni secretary or a prominent member of the faculty, especially the president. In the State of Kansas the maintenance of even skeleton organizations may be of great service to the College in a legislative emergency. Kansas State graduates for the most part are not in vocations which naturally bring them into political activities and legislative power. Individual alumni should feel it to be a duty to render any proper aid to the College in its presentation of its needs to members of the legislature. Active membership in the Association insures regular contacts through the *Industrialist* with the progress and needs of the College, and the alumni secretary is always available as a source of additional comments and suggestions.

ALUMNI AS REGENTS

Membership of alumni on the Board of Regents is thought to be of advantage to an institution. At least some understanding of it and a sympathetic point of view may be assumed to exist.

At the business meeting of the Alumni Association held June 13, 1894, resolutions were passed which urged that the alumni be represented on the Board of Regents, and that political considerations should not control appointments of Regents. In December, 1894, a circular letter was sent to all alumni and each was requested to name five graduates suitable for appointment as Regents. The names of the six who received the higher numbers of votes were forwarded to Governor E. N. Morrill, but he did not see fit to appoint any of them. The names sent were Emma Haines Bowen, '67, Sam Kimble, '73, Wm. Ulrich, '77, Warren Knaus, '82, I. D. Gardiner, '84, and W. C. Moore, '88.

In 1898 W. H. Phipps, '95, was appointed by Governor Leedy, and in 1903 Governor Bailey appointed R. J. Brock, '91, C. E. Friend, '88, J. O. Tulloss, '99, and J. W. Berry, '83. Governor Huxman appointed C. G. Nevins, '07, in 1938, and Governor Ratter named Grover Poole, '02, in 1939. It is clear that appointment of Kansas State alumni as Regents makes little appeal to governors of Kansas.

RECORD OF THE ALUMNI

An important project carried out by the Alumni Association was the publication of the "Record of the Alumni." This was undertaken in June, 1912, and a bound volume of 308 pages was issued about two years later. Information on the details of the project is part of the lost records of secretaries and treasurers. Albert Dickens, '93, was chairman of the committee which was in charge, and Amy Allen, '04, was proof-reader, and had much other responsibility. The body of the volume consists of a list of the alumni arranged by classes, in which a brief history of the experience of each since graduation is given. An alphabetical list shows the class to which each graduate belongs, and a third list is arranged to show the geographical location of the alumni in respect to residence. About 30 pages prepared by J. T. Willard are given to College history, and excellent portraits of the presidents of the College and illustrations of College buildings and parts of the campus are included. As a whole the volume is one of the most creditable publications ever produced by the College printing department. The need of an up-to-date directory of the alumni prepared on similar lines is very great. The directors of the Association have had this under discussion for many years, but financial limitations have thus far prevented publication of such a volume.

OTHER ALUMNI PROJECTS

The Association still lacks adequate quarters at the College, although the office has been provided with some good equipment. Records are maintained concerning all alumni, insofar as information is furnished by them or others. In the absence of a directory of recent date, the files of the office are indispensable as a source of information concerning individual alumni.

In 1906 the Alumni Association began collecting funds to provide for oil paintings of the three deceased ex-presidents, Joseph Denison, John A. Anderson and George T. Fairchild. These paintings were made by Miss Jane Bartlett in 1908. The one of Doctor Fairchild is a duplicate of one made by Miss Bartlett for Berea College. These portraits now hang in the library.

In 1925 the directors of the Association collected photographs of Thos. E. Will, E. R. Nichols and H. J. Waters, former presidents, for the purpose of having portraits painted, but for lack of funds have never carried out the plan. In 1935 the Board of Regents provided for a portrait of Ex-President Waters which was executed by Mr. David H. Overmyer of Topeka, and hung in the College Library.

The Association has been interested in promoting enrollment of students at the College, and to that end helped bear the expenses of Go-to-College teams sponsored by the Christian Associations. These teams made tours in the State and gave programs designed to get the young people to think that this College would be a good institution to which to go.

The alumni secretary also obtained from the high schools of the State lists of outstanding students with information concerning their talents and special interests. Letters could then be written to them to give definite information on topics that seemed pertinent. An appropriation was made at least one year to send the *Collegian* to high schools for a few weeks.

March 25, 1936, the directors launched a movement to collect a "Loyalty Fund," to be used in financing activities designed to promote the welfare of the College. Among these are securing bequests, books, objects of art and additions to the loan funds. An important objective is strengthening the existing spirit of friendly cooperation existing between the College and the State of Kansas.

SOURCES OF COLLEGE HISTORY

History is a peculiar subject in that it is being made constantly, and a complete history would include everything that has ever happened. The complete history of Kansas State College is lodged in an enormous bulk of printed material and in the memories of

tens of thousands of people. It is manifestly impossible for any one person to inspect everything that has been written concerning the College or even all the formal publications of the institution. An attempt has been made to search the most important records and to make note of the more significant facts that create a picture of the College in its several stages of evolution or record steps in its development.

The most important records are those which deal with the legal establishment of the institution and successive changes in it which were made by the Boards which have controlled it or by the president, faculty, or Council of Deans to which certain powers have been delegated. The original enabling act, and all other laws concerning land-grant colleges which have been passed by the Congress of the United States, are the most fundamental of all historical material concerning the College.

OFFICIAL COLLEGE RECORDS

Next to these national laws are the hundreds of enactments that have been made by the legislature of the State of Kansas. Under these laws, the boards of Regents, or Administration, which have been in control have taken action upon thousands of matters of greater or less importance which are recorded in the minutes of these boards. These constitute the most voluminous source of authentic history.

In respect to the actual operation of the College in the education of students and the prosecution of research, the minutes of the general faculty meetings and records of the Experiment Station officers, are the principal sources of information up to early in this century. Since that time the minutes of the Council of Deans and the minutes of the several Divisions of the College have become of commanding importance.

In printed material the annual reports of the Board of Regents of the College to the State superintendent of public instruction, and later such reports to the governor of the State, are of very great importance in giving pictures of the College in its early condition. Some of these reports were printed separately, but the earlier ones must be sought as parts of the reports of the State superintendents of public instruction. The first annual report of the College is part of the third annual report of the State superintendent, and later ones have the same numerical relation. Annual reports were made from 1863 to November 30, 1876.

After 1877, regular sessions of the legislature became biennial instead of annual, and reports of officers and boards since that time have, for the most part, been made biennially instead of annually.

The first report of this nature covered the period from December 1, 1876, to June 30, 1878—19 months—and was made with reference to the meeting of the legislature in 1879. Since then biennial reports have covered periods of two years, ending June 30 of each of the even-numbered years.

The annual and biennial reports of the College are official documents, and most valuable sources of historical material. The first to eighth annual reports are general statements prepared by the president or the Board of Regents and do not contain many details concerning the individual departments. The reports published for the years, 1871 to 1910, inclusive, are especially useful. These are the ninth to the fourteenth annual reports, and the first to the seventeenth biennial reports, inclusive. These are exceptionally valuable as sources of history in that they include reports by heads of departments concerning the several departments.

The eighteenth biennial report, issued for 1910-1912, and the last before the first State Board of Administration took control, includes a number of pages of a general character and a somewhat detailed financial statement. In addition, there are reports by the several deans concerning their Divisions, respectively. These reports of the deans varied considerably in their plans, and are necessarily lacking in detailed information concerning the departments.

When the first State Board of Administration took charge of the educational institutions in 1913, a period began which exhibited much variation in the plan of publication. This Board published a document described in its letter of transmittal as "the first annual report of the Board, covering the biennium ending June 30, 1914." It is, therefore, a report which covers one year of the administration of the preceding Board of Regents, and the first year of the new Board of Administration. This Board also issued a second annual report for 1914-15 and a second biennial report for 1914-1916.

The two biennial reports of the first State Board of Administration include somewhat extended general reports by the Board upon the several institutions in its charge, followed by reports of the heads of these institutions. The reports by President Waters for this College include general statements concerning the College and sections devoted to each of the divisions. Material for these was furnished by the several deans, although the reports as printed do not show this.

By a law effective May 26, 1917, this Board was displaced by a second State Board of Administration which was given control

of all the State institutions, educational, charitable, and correctional, 23 in all, and the four branch experiment stations besides. This Board in addition to short general reports issued sectional biennial reports on each of the three groups of institutions.

The report made by President Jardine, for the biennial period ending June 30, 1918, in general followed the plan used by President Waters, 1911-1912. The next three biennial reports were also issued during the administration of President Jardine and were of similar make-up, being general statements upon topics of contemporary importance prepared by the president, followed by reports of the several deans, or the abstracts of such reports to the president. There is much difficulty in following the practices of these Boards of Administration in assembling their publications, and some uncertainty as to their number and nature. It may be noted that President Jardine's individual report concerning this College, included in the educational institutions section, 1916-1918, is designated in parentheses as "twenty-seventh biennial." This was a blunder, as in reality it was the twenty-first biennial report of the College. Since then the biennial reports have been numbered consecutively from the so-called twenty-seventh. Similar errors were made in numbering the report of the University of Kansas and of the State Normal School at Emporia, and perhaps other institutions. As an editorial blunder that error has not been surpassed.

The legislature of 1925 by an act approved March 7, 1925, removed the University of Kansas, the Kansas State Agricultural College, and the Kansas State Teachers Colleges at Emporia, Hays, and Pittsburg from the jurisdiction of the State Board of Administration, and transferred them to a Board of Regents.

The State Board of Regents assumed control July 1, 1925, and the biennial report for the two years ending June 30, 1926, included the last year of the second State Board of Administration and the first year of the Board of Regents. The Board seems to have prepared no general report covering this period, but reports of the heads of the educational institutions were published. Since then, the Board of Regents has transmitted to the governor a general report concerning its administration, accompanied by reports from the heads of the five educational institutions under its charge.

The biennial reports made by President Farrell to the Board of Regents have treated the work of the institution under a considerable number of significant headings grouped according to their general character. There is no separation of the report into parts related to the individual Divisions of the College as such.

THE COLLEGE CATALOGUES

The catalogues issued by the College constitute an indispensable source of history of the institution in respect to many aspects of its work. The first catalogue was printed in 1864 and included a list of the students enrolled during the year, 1863-64, and general information which probably applied to the ensuing year as well as to the completed year. The course of study was announced, and information concerning expenses, rules, and regulations, and other matters was included. The second annual catalogue was printed in 1865 and was prepared on lines similar to those of the first. The third annual catalogue was issued in June, 1867, for 1866 and 1867. The so-called fourth annual catalogue was printed in 1869, and in 1870 a catalogue was printed with no specific numerical designation. A similar plan was followed in the catalogue printed in 1871, and also in one printed in 1873, which was the last issued under the administration of President Denison. In 1874 President Anderson issued a catalogue which he designated as Handbook of the Kansas State Agricultural College, and in 1877 a biennial catalogue for the calendar years 1875-1877 was issued. No other catalogues were published by the Anderson administration.

When President Fairchild took over the administration of the institution, he printed, in the spring of 1880, a catalogue of the officers and students covering the period from August, 1877, to June, 1880. There was also a complete list of the members of the Board of Regents, officers of the Board, members of the college faculty, and graduates of the College from its beginning in 1863 to June, 1880. No number was assigned to this catalogue, and it contains many errors in dates. The catalogue issued for 1880-81 is entitled Eighteenth Annual Catalogue, of the Officers and Students, and since then catalogues have been issued annually and numbered consecutively with this. The number assigned to that catalogue is the one which it would have had if a catalogue had actually been issued each year previously, from 1864 to 1880, inclusive.

THE INDUSTRIALIST

The *Industrialist*, the first number of which appeared April 24, 1875, has been published continuously since then, although its form and frequency of issue have not been uniform. It is an inexhaustible storehouse of facts concerning the College and its activities, and in respect to individual members of the governing boards, faculty, and student body. It contains many valuable articles written by members of the faculty on educational subjects, or reporting the results of experiments and research. For the first five years, the *Industrialist* was issued weekly, including the summer

vacation, a week being omitted now and then. The summer of 1880 only one or two numbers were printed during the vacation, and that practice has been the general rule since. From its beginning to October 6, 1877, the type page was six and five-eighths inches by nine and three-eighths inches. October 13, it was increased to eight and seven-eighths inches by twelve and one-fourth inches. The size was increased again August 24, 1889, when the page was made nine and one-fourth inches by fourteen inches. This continued to December 6, 1897. Throughout these periods it was a four-page paper. January 1, 1898, the *Industrialist* was changed to magazine form and was issued monthly. The type page was four and one-half by seven and one-half inches. This provided for articles of greater length, and local news features were much restricted because of the infrequency of publication. In the summer of 1899 it was again placed on a weekly basis, but the magazine form was retained. This plan of publication was continued until October 15, 1910.

The department of industrial journalism was established September, 1910, and the head of the department was Prof. Charles J. Dillon. His plan of instruction included the transformation of the *Industrialist*. It became a four-page paper of newspaper type, the page being eleven and one-eighth inches by fifteen and five-eighths inches. This was issued weekly and was treated almost entirely as an agricultural paper. Professor Dillon had the view that items of local interest should be left largely to the students' paper for attention. The result was that at that time the *Industrialist* ceased to be a reservoir of information concerning minor local improvements and everyday news in respect to members of the faculty and their activities. The paper has continued to be issued in the size then adopted, but it has gradually become more extended in the scope of material included. It has not, however, been a medium for publication of articles by members of the faculty in the general way that it was previously. The *Industrialist* is the official organ of the College, and statements appearing in it should be acceptable as authentic, but errors in respect to facts appear at times and have so appeared throughout the history of its publication. It has, however, been edited with unusual care, and statements given in it as official are usually to be relied upon with safety.

PUBLICATIONS OF THE EXPERIMENT STATIONS

With the establishment of the Agricultural Experiment Station under the provisions of the Hatch Act, more or less regular publication of the results of research in agriculture began. Throughout about fifteen years previous to that time, the results of experi-

mental work in agriculture were published in the *Industrialist* and biennial reports of the College, reports of the State Board of Agriculture, and in the newspapers and other periodicals of the country.

The first and second annual reports of the Agricultural Experiment Station consisted of certain general statements, a report of the director, and one of the Experiment Station Council, followed by reports of the different departments which participated in the work of the Station, namely, the farm department, chemical department, horticultural department, and botanical department. The reports of these individual departments had articles upon certain subjects which had been under investigation, and incorporated material which had been issued previously as separate bulletins.

Beginning with 1890, the annual reports included only a financial statement and a report of the Experiment Station Council, a part of which was a list with outlines of the bulletins issued during the year. Some report was also made on work in progress. An annual volume was issued consisting of the annual report and bound with it copies of the bulletins for the year paged consecutively and indexed. This plan of publication was continued up to the close of the fiscal year ending June 30, 1906. The bulletins of the Agricultural Experiment Station were also issued separately.

September 1, 1906, the administrative work of the Experiment Station was taken over by Director Charles William Burkett. He was clothed with much greater authority than previous directors had exercised, and the form of the annual report was changed more or less. The Experiment Station Council did not participate as such in the report for 1906-07. General statements by the director concerning the staff publications issued, the work of the branch stations, and some other topics, and the report of the custodian of funds were followed by short reports of the heads of the departments to the director. These departmental reports consisted chiefly of statements concerning the work in progress in the departments. These official reports were followed by reprints of bulletins to which the serial numbers of the bulletins were not attached. The report for 1907-08 was similar except that it did not include bulletins issued. Director Burkett resigned August 31, 1908.

Prof. Edwin H. Webster became director of the Agricultural Experiment Station December 22, 1908, and held the office until December 31, 1912. No reports of the Station were published by him, but bulletins were issued separately as usual.

William M. Jardine was made acting director January 1, 1913, and became director September 1, 1913. June 30, 1914, Director Jardine prepared a report to the governor in which he included

statements concerning the most significant changes in the Station staff succeeding the date of issue of the last report made by Director Burkett. He also made a brief statement concerning publications issued from 1908 to 1914 and gave a list, with summaries, of the Station publications which appeared for the year ending June 30, 1914, and a partial list of articles by members of the staff appearing in scientific journals. The report also summarized, necessarily rather briefly, the experimental work in progress including that at the branch stations, most of which had been under way for several years. The publication concluded with a valuable article covering 34 pages on the influence of the time and method of preparing the seedbed upon the yield of winter wheat. This was written by the agronomist, L. E. Call.

Annual reports of a similar character followed until 1919-20, but after 1915-16 no special article was included. Francis David Farrell became director, September 1, 1918, and in the report for 1919-20 included a list of the publications of the staff from the beginning in 1888 to December 31, 1920. This includes not only the material issued by the Agricultural Experiment Station, but many important articles published in periodicals.

Beginning with the biennium ending June 30, 1922, reports of the Agricultural Experiment Station have been issued biennially. These now consist of about 150 pages each, and include summary statements concerning the scores of projects under investigation. The lists of publications of members of the staff are being continued, as well as statements concerning changes in personnel, and other general matters affecting the Station.

The publications of the Agricultural Experiment Station have been annual reports, biennial reports, bulletins, technical bulletins, press bulletins, circulars and inspection circulars, and transient announcements.

Another series of college publications is that issued by the Engineering Experiment Station. This Station is not liberally supported financially, and its experimental results are not as voluminous as those of the Agricultural Experiment Station. Its bulletins have appeared as numbers of the *Industrialist*, or of the *Kansas State College Bulletin*. They cover a wide range of investigation of general public interest, or of professional importance. The first bulletin was published in December, 1914, and the total number issued to June 30, 1939, was 37.

THE COLLEGE BULLETIN

The *Kansas State Agricultural College Bulletin* was entered as second-class matter at the post office at Manhattan, November 6,

1916, and has been the medium for publication of a great variety of material produced at the College, including the College Catalogue since 1916. In 1931 the name was changed to *Kansas State College Bulletin*. Unfortunately this publication has not been conducted under a definite coordinating policy, and few, if any, complete files have been maintained of the very valuable articles that have been issued under its covers. Limited runs of other series of institutional publications have also appeared from time to time.

ILLUSTRATIONS

Illustrations of all kinds make up an immense body of material of historical value. The earlier examples are engravings made from drawings which too often were not true to existing situations, but included features which represented the artists' ideas in respect to future developments. In later years the improvements in photography made it possible to present zinc etchings and half tones showing buildings, laboratories, plants, animals and countless special features of institutional activity. The College catalogues from 1877 to 1909 have in their illustrations preserved College history that otherwise would have been lost. Other College publications share in this type of contribution to knowledge. Thousands of photographs exist which never have been reproduced for printing, and which will be authentic sources of history. Unfortunately most of these are not labeled nor dated.

REPORTS CONCERNING CLASSES

A repository of important historical material, which is not available elsewhere, consists in files of cards which show in respect to each class taught, the name of the teacher, the subject, the time and place, the credit hours and the enrollment. President Nichols instituted the practice of having such records made as reports to him, and his successors have continued it. Duplicates are also sent to the deans and triplicates to the heads of departments. These reports to the president are filed in a fireproof vault. For certain periods these reports concerning classes have been assembled in condensed and more convenient form. Announcements of courses in catalogues, and even including them in the printed schedules as being offered at certain times are not proofs that they were actually taught, but the report cards described are indisputable.

STUDENT PUBLICATIONS

Publications issued by students contain a large amount of historical material, some of which is of great value, but, unfortunately, it is often greatly lacking in accuracy. Material prepared

with some deliberation, especially if under the guidance of mature, responsible college officers, is usually more dependable.

The first distinctively student publication of any permanent importance is the College Symposium, which was published by the Class of 1891. This contains a history of the College, prepared by Professor J. D. Walters, which covers seventy pages. It treats of the institution in all its phases and, while not free from errors, is a very valuable compilation. The College Symposium also contains biographies of those who were members of the faculty at that time and short sketches of graduates of the College previous to the Class of 1891. A list of the members of the Class of 1891 is followed by a history of their college activities. The volume also has articles concerning the literary societies accompanied by some of the literary products of their members and closes with a directory of the Manhattan churches.

Class books were not issued each year succeeding the Symposium. The next one, prepared by the Class of 1895, was concerned almost entirely with class matters. Class books of similar nature, but gradually increasing in scope, were published by the classes of 1896, 1898, 1900, 1904, 1905, and 1906. Most of these were given specific names. The Class of 1907 issued a considerable volume which it designated as College Annual. The Class of 1908 issued only a pamphlet concerning its own members. During the interval a movement was undertaken to establish the custom of issuing the book annually. Suggestions for a name for it were sought, and Royal Purple was adopted. The first volume was issued by the Class of 1910, and it has appeared annually since then.

Royal Purple is the repository of a large amount of information concerning the College, most of which is fairly reliable, although the books are replete with typographical errors, especially in respect to names of persons.

Agitation looking toward the establishment of a student paper was forestalled for a number of years by opening the columns of the *Industrialist* to contributions from the student body. In this connection, student editors were elected. This privilege became effective April 18, 1891. However, student journalists naturally prefer to operate their own paper rather than to have their productions subject to the editorial scrutiny of the faculty, and the *Students' Herald* was started January 8, 1896. The paper has been published continuously since, with changes of name. From April 2, 1913, to April 22, 1914, it was called the *Kansas Aggie*, and the present name, *Kansas State Collegian*, first appeared April 25, 1914. The students' paper is a valuable index to the current events of a social or general character at the College. The material, being

usually rather hastily prepared, frequently exhibits errors, and should be regarded primarily as suggestive rather than authoritative.

OTHER SOURCES OF HISTORY

College history, especially of individual members of the faculty, is also imbedded in the publications of several State societies. Among these are the Kansas State Historical Society, the Kansas Academy of Science, the State Board of Agriculture, and the State Horticultural Society. Information of importance may be found in *Kansas*, edited by Prof. Frank W. Blackmar, *Kansas and Kansans*, by William E. Connelley, *History of the State of Kansas*, by A. T. Andreas, *Annals of Kansas*, by D. W. Wilder, and several other less well-known publications.

In addition to material relating to the College which has appeared in books and pamphlets, there exists the enormous bulk of newspapers issued within the last seventy-five years or more. The local papers of Manhattan, Junction City, and other towns, and the State papers, mostly published at Topeka, reflect public opinion concerning the College in ways not suggested by the minutes of the Board of Regents, or by published reports of the College. The incomparable files of Kansas newspapers preserved by the Kansas State Historical Society are of inestimable value to the student.

Unfortunately, newspaper statements cannot always be taken as authentic. They are, however, very valuable as suggestions, or as records of events in a general way. They also possess extreme value as indicators of the state of the public mind, often disclosing its unfairness and its prejudice because of personal interests affected, or interests of friends. It is certain that the general attitudes of the public mind cannot be ascertained without consulting contemporary newspapers freely. The College has passed through a few periods of an extremely controversial nature, and accuracy of judging is promoted to a considerable extent by reading both sides. This course may cause the historian to lose most of his friends, since all the parties in controversy will take issue with any statement which attempts to be fair to all concerned.

Printed matter is more or less accessible to anyone, but there also exists a body of historical record concerning the College that is not open to the public as a rule. This consists of the minutes of the governing Boards, the faculty, and the Council of Deans. For more detailed research there are the minutes of Divisional faculties of the College, reports of department heads to deans, and of deans to the president, and countless reports of committees upon every phase of the activities of the College. Some College officers are carefully preserving such material, while others are not.

Letters are often of great value, especially when accompanied by letter-press copies or carbon copies of replies, or of the antecedent correspondence, as the case may be.

In addition to all published or written materials, are the memories of living individuals. Very few are now living who recall the beginnings of the College, but, for more recent years, increasing numbers are available as sources of information which is more or less reliable. Anyone who has had much experience in respect to personal reminiscences knows that they are liable to be erroneous. Reminiscences will often serve as points of departure suggesting matters which may be investigated in the written or printed records, and they are always interesting and important as testimony concerning public opinion or belief.

The most interesting features of College history, whether we consider broad outlines of policy, small details, or matters of all degrees of significance between, cannot be found in printed or written records. These are the discussions among members of the Board and those seeking to influence them; the special pleading in behalf of candidates for appointments; the certificates of recommendation and the opposing views. These and many other verbal activities preceded official action which may be recorded in a few non-committal words. The minutes of the Board of Regents may contain a simple statement that the resignation of someone named was accepted. That is the fact available to the historian, but it may be only the climax of a long series of criticisms or complaints concerning the character or competency of the individual. The unrecorded gossip concerning the personalities of faculty members or employees would be more entertaining to the reader than the bare, historical, final record.

Personal friendships have had much to do with determining to whom appointments should go. Arguments on this basis have, in the course of three fourths of a century, been made in thousands of instances. It is a fact that appointments to membership on the Board of Regents, to the faculty, or to minor positions, even down to choosing laboratory helpers among the students, must follow consideration by the appointing power of statements made by those who have direct knowledge concerning the fitness of those under consideration. Choices made after prolonged study of the claims to recognition presented by those best acquainted with candidates, and who would naturally in most cases be their friends, are most likely to lead to wise action. Appointments made suddenly, without opportunity to present the qualifications of others, or the weaknesses of the one appointed, sometimes prove to have been very unwisely made. If the historian could get the testimony of all

those whose efforts have determined the policy of the institution and the faculty appointments made, he could write history that would be vivid beyond anything which may be compiled from written or printed records.

The unsuccessful efforts to accomplish some purpose connected with the College would in themselves make a large volume. Most of the personal activities related to the College which never are reduced to writing are known to comparatively few persons. Doubtless, many times it has been in the interest of the persons concerned that indiscreet efforts should remain unpublished and even unknown to the general public. A little mulling over of these considerations will convince anyone that the most interesting things in the history of the College cannot be collected. They have disappeared with the lives of the actors in the little dramas.

Another consideration which hampers more or less the free action of the historian is regard for the personal feelings of men or women still living, or for descendants of those discussed. Human nature is such that absolute fairness of judgment is probably an impossibility. Personal, institutional, official, and political relations are so complex that the same events cannot be grasped correspondingly by a number of different students or observers. Judgment upon them must necessarily differ, no matter how sincere an effort the historian may make to be perfectly fair. The better he succeeds, the more numerous his critics will be. In general, in passing judgment upon a situation, one's conclusion is greatly affected by his own personal connection with it, his own previously adopted views on the questions involved, or his personal likes or dislikes. Necessarily each of those who are thus prejudiced on opposite sides will expect the historian to represent his side and adopt his views and conclusions. If he fails to do so, he will be regarded as untrue to the facts of history and prejudiced in favor of the opponent.

In local history, where everybody is acquainted with everybody, so to speak, this personal inconvenience and source of regret to an author is more accentuated than it is when his project is production of the history of something miles, or centuries, away from his personal friends. These difficulties are greater in connection with matters of public opinion, or knowledge that is preserved in memory, and conveyed by word of mouth, than it is if printed records only are taken into consideration. But sometimes the matter in controversy is of such moment and the written record so far reaching that some interpretation and more or less elaboration of the situation by the author is necessary if the reader is to obtain an idea of the affair which is anything like adequate. In this history of the College, those episodes which have been accompanied

by the warmest controversy, and which have determined important features of College policy and personnel, cannot be ignored and left only to a bare statement of official records. But in any discussion of them, it is the aim of the author to be as objective, fair, and impersonal as possible, and "with malice toward none and charity for all" to set forth events as he sees them.

INDEX TO COLLEGE HISTORY

In connection with collecting and verifying historical data for use in this book the author assembled about 38,000 references to printed or written records. These were typed in triplicate, and two sets of slips are arranged alphabetically and one, chronologically. They support most of the statements made in the book, and replace footnotes which by their great number would have cumbered the pages. Material thus indexed includes, in part, some United States publications, the session Laws of Kansas, reports of the Kansas State Board of Agriculture, the *Industrialist*, 1875 to October 15, 1910, and some later disconnected periods, early volumes of the *Students' Herald*, the Minutes of the Board of Regents and Boards of Administration, the Faculty Records, the Minutes of the Council of Deans, annual and biennial reports of the College, College catalogues, and to a less extent newspapers and other publications.

SEVENTY-FIFTH ANNIVERSARY OF THE COLLEGE

In May, 1937, the Council of Deans gave preliminary discussion to a fitting observance of the Diamond Jubilee of the College the next year. A number of features were suggested and given general approval. One of these was the issuance of a bulletin which should recount outstanding accomplishments of the College, and point to important milestones in its progress. It was expected that Doctor Willard's History of the College would be published also, but timely preparation in satisfactory form proved to be impossible.

Pursuant to this discussion, a faculty committee consisting of George Gemmell, chairman, Grace E. Derby, Charles W. Matthews, Alpha Latzke and Lowell E. Conrad was appointed by President Farrell July 9, 1937, to consider in detail plans for the celebration. The Council of Deans wished to give the alumni and the students prominent parts, and the committee was instructed to confer with the officers of the Alumni Association and of the Students' Governing Association.

The committee reported October 28, 1937, and recommended an elaborate series of programs. On consideration the Council of Deans eliminated parts, and approved the following:

- (1) A Founders' Day program February 16, 1938, to include

a special student assembly, a nation-wide broadcast of commemorative features, and a banquet at which distinguished out-of-town guests would speak.

(2) A symposium May 28, to be led by Kansas State College alumni, preferably those who are to receive honorary doctor's degrees.

(3) May 30, a symposium to be led by outstanding leaders in the fields of research in the land-grant colleges and universities, and education in the land-grant colleges and universities. These symposia were to be incorporated with the regular features of Commencement.

(4) A note of recognition of the anniversary to be included in the various general events of the College year such as Engineers' Open House, Home Economics Hospitality Days, the Annual Extension Conference, and Homecoming.

(5) In connection with Homecoming, 1938, to have a great parade of floats presenting the various activities of the College from an historical as well as the current point of view. This parade to be a community enterprise in which Manhattan and other towns should participate.

A prize of five dollars was offered for an acceptable sketch for a cover design for the College catalogue for 1937-38.

The bulletin provided for appeared in May, 1938, and was entitled *The College in the Life of the Land*. It was written and illustrated by members of the faculty under the editorial guidance of Prof. Charles E. Rogers. It was printed by the department of industrial journalism and printing, and is one of the most beautiful examples of printing that the College has issued.

The Founders' Day programs were carried out very satisfactorily. The very successful assembly program was in charge of the Students' Governing Association. The president, Hyle Claflin, presided, and made an introductory speech. Other participants were George Aicher, Invocation; Paul Hodler, Agriculture and Veterinary Medicine; Kenneth Witt, Engineering and Science; Ruth Scholer, Home Economics; and Lloyd Mordy, conducting the singing of Alma Mater.

The broadcast included several episodes in the history of the College. The script was prepared and the actors trained under the direction of Prof. W. C. Troutman. The actors were students, faculty members, and townspeople.

The Founders' Day dinner was sponsored by the Manhattan Branch of the American Association of University Women, and Mrs. E. L. Holton was chairman of the committee in charge. The dinner was an elegant product of the department of institutional

management, and a huge birthday cake carried 75 lighted candles. The addresses were by President Farrell, The Founding; Dr. Abby Marlatt, Educational Pioneering for Women; Regent C. M. Harger, Kansas becomes Articulate; Chancellor E. H. Lindley, Education in the Machine Age; Pres. W. M. Jardine, Education for Human Service; and Gov. W. A. Huxman, Now and the Future. In their absence Professor Rogers read the address of President Jardine, and Prof. H. W. Davis that of Governor Huxman. Following each speech a *tableau vivant* was presented.

The program closed with the singing of the Loving Cup Song written by Professor Davis:

Come pledge a firm fidelity to dear old Kansas State,
May honor ever crown her fame, and merit keep her great;
Forever may her worth increase, her sons and daughters be
United in a happy bond of deathless loyalty.

During the singing, loving cups were passed among the guests.

The programs of Commencement all gave recognition to the anniversary, but the two symposia were presented especially for that purpose. On Alumni Day, Saturday, May 28, addresses were given as follows: Food and Well Being, by Ula M. Dow, '05; The Contribution of Lighting to Human Development, by William L. Enfield, '09; The Veterinarian's Contribution to Human Welfare, by William A. Hagan, '15; and Shall We have an Out of Doors or an Indoor Civilization? by David G. Fairchild, '88. These alumni received honorary doctor's degrees at the commencement exercises the next Monday.

At the Alumni-Senior dinner Saturday evening, Regent C. M. Harger spoke on The Voice of Experience, President Farrell on Alma Mater and her Children, and J. T. Willard, '83, on the Retrogression of Democracy. The next day, E. O. Sisson, '86, gave the baccalaureate address, his subject being The College and the American Ideal. All these were serious productions in keeping with the spirit of the anniversary.

An important symposium was presented Monday forenoon. Dr. A. C. Willard, president of the University of Illinois, spoke on Research in the Land-Grant Colleges and Universities. His carefully prepared paper was discussed by Dr. M. F. Miller, of the University of Missouri, and Dr. Abby Marlatt, of the University of Wisconsin. Dr. Albert R. Mann, vice-president of the General Education Board, treated Education in the Land-Grant Colleges and Universities. Doctor Mann's long contact with educational problems enabled him to submit an exceptionally fine treatment of his theme. This was discussed by Dr. Lita Bane of the University of Illinois.

The Homecoming parade was the most scenic, and the best prepared and conducted event of that character ever produced in Manhattan. Farm bureaus in all parts of the State, the Manhattan Chamber of Commerce, Manhattan civic clubs, College organizations and departments, and special features planned by the committee united to make the occasion memorable. Hundreds of snapshots and motion pictures were made which will transmit the parade to future generations to a certain extent.

Provision for formal preservation of a record of the diamond jubilee celebration was made by the issuance of *The College in the Life of the Land*, already mentioned, and No. 5, vol. XXII of *Kansas State College Bulletin*, Programs Presented on Founders' Day, February 16, 1938; No. 10, vol. XXII, Programs Presented During Commencement Week, May, 1938; and No. 5, vol. XXIII, Homecoming Day, October 29, 1938. These four publications were rather widely distributed and in a total of 183 pages include in full the many addresses made, some portraits, and reproductions of photographs of some of the floats in the homecoming procession.



SEVENTY-FIFTH ANNIVERSARY PARADE
Float drawn by six-horse team, October 29, 1938.

CHRONOLOGY KANSAS STATE COLLEGE

- 1862 Morrill Act signed by President Lincoln, July 2.
- 1863 Provisions of Morrill Act accepted by the State of Kansas, February 3.
- 1863 College located at Manhattan, Kansas, February 16.
- 1863 Bluemont Central College building and 100 acres of land deeded to State of Kansas, June 10.
- 1863 Joseph Denison elected president, July 23.
- 1863 Kansas State Agricultural College opened, September 2.
- 1864 Five-year curriculum based on common schools adopted.
- 1868 First farmers' institute held by the College, November 14.
- 1869 Seven-year curriculum based on common schools adopted.
- 1871 Present campus, 155 acres, purchased for College farm, July 11.
- 1871 Practical work in agriculture and horticulture given.
- 1871 Six-year curriculum based on common schools adopted.
- 1872 Greek language eliminated from curriculum.
- 1872 Instruction in carpentry and blacksmithing first given.
- 1872 Instruction in veterinary medicine introduced. Discontinued in 1874.
- 1873* First building erected by the College on present campus, one wing of a stone barn, now Farm Machinery Hall.
- 1873 John A. Anderson became president, September 1.
- 1873 The Board of Regents adopted a new policy, September 3.
- 1873 Instruction in sewing, dressmaking, and millinery began in December.
- 1873 A general system of daily work by students in some "industrial" adopted.
- 1874 Three six-year curricula announced: Farmer's, mechanic's, and woman's.
- 1875 The *Industrialist* established, April 24. Published continuously since.
- 1875 The barn erected in 1873 remodeled to become the College building.
- 1875 Center section of present woodshop erected.
- 1875 College instruction transferred to the present campus in August.
- 1875 Instruction in Latin abandoned.
- 1876 Chemical laboratory erected, now Mathematics Hall.
- 1876 Horticulture Hall erected, now Illustrations Hall.
- 1877 Second stone barn, 48 x 96 ft., erected. This was razed in 1914.
- 1877 Four-year curricula based on common schools adopted for farmers and women.
- 1879 North wing of Anderson Hall erected.
- 1879 Resignation of President Anderson, presented February 1, became effective September 1.
- 1879 Prof. Milan L. Ward acted as president February 1 to November 30.
- 1879 President George T. Fairchild began service, December 1.
- 1880 Curriculum revised and much strengthened.
- 1882 Central part of Anderson Hall erected.
- 1883 Greenhouse attached to Horticulture Hall erected.
- 1884 South wing of Anderson Hall erected.
- 1885 Residence for the president erected.
- 1886 Extensive addition made to second stone barn for experiments in feeding.
- 1887 Chapel, Anderson Hall, enlarged.
- 1887 Hatch Act approved for support of agricultural experiment stations, March 2.
- 1888 Veterinary instruction reintroduced.
- 1888 Horticulture and entomology office and propagating pits provided.
- 1889 Water and sewer system installed.
- 1889 Barn and tool house provided for department of horticulture. Razed in 1919.
- 1890 Second Morrill Act approved, August 30.
- 1891 Machine shop added to shop building at southwest corner.
- 1894 Provision made for heating buildings by steam.
- 1894 Fairchild Hall erected for the library and biological sciences.
- 1894 Beginning of electric lighting at the College.
- 1895 Residence of the president burned from stroke of lightning, April 5.
- 1897 Act reorganizing Board of Regents effective, March 13.

* In this chronology the year stated as that of the erection of a building is the latest of the period within which the appropriation was available, unless the actual date of completion is on record, or known to the writer.

- 1897 Revolutionary changes in the Faculty, April 8.
1897 Thomas Elmer Will became president, July 1.
1897 Curriculum adapted in the senior year to the needs of farmers, mechanics, and women.
1898 Kedzie Hall erected for home economics.
1898 Four four-year curricula adopted: Agricultural, engineering, household economics, and general.
1899 Ernest R. Nichols began service as president, July 1.
1899 Curriculum in electrical engineering adopted.
1900 Bill approved, March 28, ceding Fort Hays Military Reservation to the State of Kansas.
1900 Agriculture Hall, now Education Hall, erected.
1900 Dairy barn erected. Enlarged from time to time and razed in 1933.
1900 Extensive additions made to shops.
1900 Chemical laboratory burned, May 31.
1900 Sewer laid to the Kansas River.
1901 Fort Hays branch experiment station established using 3,560 acres.
1901 Work began in systematic destruction of prairie dogs and gophers.
1901 Chemical laboratory rebuilt as gymnasium for young women.
1902 Denison Hall built for chemistry, physics, and electrical engineering.
1902 Fairchild Hall enlarged.
1903 Plant for College water supply provided.
1904 Water tower erected.
1904 Curricula thoroughly revised, and curriculum in architecture added.
1904 Summer school provided for teachers of home economics.
1904 Building for dairy manufactures erected, now Chemical Engineering Hall.
1904 Auditorium erected.
1905 Addition to woodshop built across the north end.
1905 Four-year curriculum in veterinary medicine offered.
1906 Adams Act approved, March 16, for research in agriculture.
1906 Garden City branch experiment station established.
1906 Seed house erected. Razed in 1911.
1906 Boiler room and engine room enlarged.
1907 Nelson amendment to the Morrill Act of 1890 approved, March 4.
1907 Dickens Hall erected for horticulture.
1907 Plant museum greenhouse provided (14 on map).
1908 Curricula revised; curriculum in agriculture expanded into five specialized forms, and curricula in printing and in civil engineering added.
1908 Council of Deans created for administration of College, July 30.
1908 Calvin Hall erected for home economics.
1908 Veterinary Hall erected.
1909 East section of Engineering building, and addition at south end of woodshop, and other improvements made.
1909 Gas-producing plant erected.
1909 Henry Jackson Waters became president, July 1.
1910 All curricula thoroughly revised. Admission requirements made eight units. Class periods made sixty minutes instead of fifty minutes in length.
1910 Engineering experiment station established.
1910 Greenhouse constructed (18 on map).
1911 Tribune branch experiment station established.
1911 Four-year curriculum in industrial journalism provided.
1911 A six-week general summer school provided.
1911 Nichols Gymnasium erected.
1912 Organization of the College into Divisions of Agriculture, Engineering, Home Economics, General Science, and College Extension.
1913 Fifteen high school units required for admission, effective in September.
1913 All curricula completely revised, the agricultural curricula consolidated. Curriculum in printing abandoned.
1913 School of Agriculture, offering secondary education, provided.
1913 Colby branch experiment station established.

- 1913 East wing of Waters Hall and adjacent stock judging pavilion erected.
- 1913 State educational institutions placed under control of State Board of Administration, July 1.
- 1914 Smith-Lever Act for promotion of cooperative extension approved, May 8.
- 1914 Farm barn for animal husbandry erected. Material from second stone barn used.
- 1914 Serum plant erected.
- 1914 Four-year curriculum in agricultural engineering offered.
- 1915 County farm bureaus authorized by State law approved March 12.
- 1915 Cafeteria established in Kedzie Hall.
- 1916 Three-year curriculum in applied music offered.
- 1916 Six-year curriculum in animal husbandry and veterinary medicine adopted. Abandoned 1938.
- 1917 Curriculum in flour-mill engineering adopted.
- 1917 Smith-Hughes Act for support of vocational education approved, February 23.
- 1917 All State institutions placed under a single Board of Administration, July 1.
- 1917 Horticulture barn erected on old College farm.
- 1917 College calendar changed from three-term to semester plan. All curricula rewritten and one in flour mill engineering added.
- 1917 Resignation of President Waters effective, December 31.
- 1918 Dean J. T. Willard acting president January 1 to February 28.
- 1918 The director of the summer school made a dean.
- 1918 Dean William M. Jardine became president, March 1.
- 1918 Summer school session lengthened to nine weeks.
- 1918 The position of dean of women made a separate office.
- 1918 Six wooden buildings erected for students' army training corps.
- 1919 Curriculum in industrial chemistry offered. Curricula in agricultural chemistry and in bio-chemistry offered, but withdrawn in 1923.
- 1919 Division of Veterinary Medicine organized.
- 1919 Residence built in 1866 remodeled for use as an infirmary for students.
- 1920 Swine barn erected.
- 1920 Four-year curriculum in music offered.
- 1921 Central and west portions of Engineering Hall erected.
- 1921 Four-year curriculum in rural commerce offered.
- 1921 Five-year curriculum in home economics and nursing offered.
- 1922 Thompson Hall erected for instruction in institutional management. Cafeteria a feature.
- 1922 Bureau of research in home economics established.
- 1922 West wing of Memorial Stadium erected.
- 1923 Veterinary clinics building erected.
- 1923 West wing of Waters Hall erected.
- 1923 Residence built for president of the College.
- 1924 Curriculum in chemical engineering adopted.
- 1924 Curriculum in landscape architecture offered. This was abandoned in 1937.
- 1924 East wing of Memorial Stadium built.
- 1924 School of Agriculture, or Vocational School, discontinued.
- 1924 Clarke-McNary Act approved, June 7.
- 1924 Broadcasting station KSAC formally inaugurated, December 1.
- 1925 Curriculum in architectural engineering adopted.
- 1925 Curricula in physical education offered.
- 1925 Purnell Act endowing research approved, February 24.
- 1925 President Jardine on leave of absence from March 1; resigned, May 5.
- 1925 Dean Francis David Farrell made acting president, March 1, and president, May 5.
- 1925 Board of Regents in control of five state educational institutions, July 1.
- 1926 Van Zile Hall, a residence for women completed and occupied.
- 1927 Library building erected.
- 1927 Sheep barn erected.
- 1927 Greenhouses erected (31 on map).
- 1927 Curriculum in agricultural administration offered.
- 1927 Six-year curriculum in general science and veterinary medicine adopted. Abandoned 1938.

- 1928 Heat, power, and service building erected.
- 1928 Capper-Ketcham Act approved, May 22.
- 1928 Fairchild Hall remodeled after removal of library.
- 1928 Back wall of east section of Stadium built.
- 1928 College accredited by Association of American Universities.
- 1928 Group insurance provided through an organization of teachers and employees.
- 1931 Name changed to Kansas State College of Agriculture and Applied Science, March 9.
- 1931 Curriculum in commerce with special training in accounting offered.
- 1931 Curricula in music education and in applied music replaced all other curricula in music.
- 1931 Curriculum in agriculture with special training in landscape gardening offered.
- 1931 Graduate Study organized as a Division of the College.
- 1932 Degree Doctor of Philosophy first offered.
- 1932 The curriculum in veterinary medicine was extended to five years.
- 1933 Building for dairy production erected. Some old wooden buildings razed; others moved.
- 1933 Curriculum in milling industry replaced that in flour-mill engineering.
- 1934 A twenty-year program of possible development assembled.
- 1934 Denison Hall destroyed by fire, August 3.
- 1935 Bankhead-Jones Act for support of teaching, research and extension approved, June 29.
- 1936 Curriculum in industrial arts authorized.
- 1937 Appropriation made for physical science building to replace Denison Hall.
- 1937 Curriculum in specialized horticulture replaced curricula in landscape gardening and in landscape architecture.
- 1937 The use of a special program for induction of freshmen was inaugurated.
- 1937 Health and accident insurance provided by an organization of teachers and employees.
- 1937 Beef-cattle nutrition barn erected.
- 1938 Back wall of west section of Memorial Stadium built.
- 1938 Quarters for athletic teams and coaches constructed under seating deck of east section of Stadium.
- 1938 Diamond Jubilee of College celebrated.
- 1939 Erection of Physical Science Building completed.
- 1939 A new law enacted in respect to the Board of Regents, effective March 29.
- 1939 Swine nutrition barn erected.
- 1939 Two sections of greenhouse and a head house erected (34 on map).

ENROLLMENT AND DEGREES CONFERRED

1. College year. 2. Enrollment for College year. 3. Number graduated within calendar year indicated by second date in College year. 4. Advanced degrees conferred.

1	2	3	4	1	2	3	4
1863-64	106	0	0	1903-04	1,605	102	1
1864-65	114	0	0	1904-05	1,462	107	2
1865-66	127	0	0	1905-06	1,690	96	4
1866-67	142	5	0	1906-07	1,937	119	5
1867-68	115	0	1	1907-08	2,192	116	4
1868-69	160	0	0	1908-09	2,308	139	12
1869-70	142	0	0	1909-10	2,305	144	2
1870-71	145	5	5	1910-11	2,407	205	2
1871-72	168	3	1	1911-12	2,523	230	6
1872-73	173	2	1	1912-13	2,928	230	4
1873-74	184	5	0	1913-14	3,027	283	8
1874-75	143	2	1	1914-15	3,089	223	6
1875-76	238	5	0	1915-16	3,314	341	18
1876-77	232	9	1	1916-17	3,339	197	13
1877-78	152	4	0	1917-18	2,406	216	17
1878-79	214	9	2	1918-19	2,991	167	7
1879-80	276	7	2	1919-20	3,376	260	11
1880-81	267	8	0	1920-21	3,395	249	14
1881-82	312	9	2	1921-22	3,560	272	28
1882-83	347	12	3	1922-23	3,626	341	31
1883-84	395	17	0	1923-24	3,812	342	43
1884-85	401	14	1	1924-25	4,031	335	53
1885-86	428	21	2	1925-26	4,019	341	51
1886-87	481	21	5	1926-27	4,083	357	77
1887-88	472	22	1	1927-28	3,878	428	70
1888-89	445	25	1	1928-29	3,879	461	84
1889-90	514	27	2	1929-30	3,987	469	91
1890-91	593	52	2	1930-31	4,045	424	91
1891-92	584	35	0	1931-32	3,928	486	119
1892-93	587	39	9	1932-33	3,359	523	118
1893-94	555	39	6	1933-34	2,928	423	70
1894-95	572	57	3	1934-35	3,436	470	52
1895-96	647	66	5	1935-36	4,261	478	72
1896-97	734	55	8	1936-37	4,457	521	90
1897-98	803	69	10	1937-38	4,695	637	92
1898-99	871	53	10	1938-39	4,800	720	86
1899-00	1,094	58	3	Totals	135,302	12,374	1,553
1900-01	1,321	60	9				
1901-02	1,396	52	3				
1902-03	1,574	55	0				

The statistics presented above are believed to be as nearly correct as it is possible to make them at this date. The enrollments for the years 1863 to 1879 are derived from financial records not so used before 1937.



KANSAS STATE COLLEGE BAND

Parade on Poyntz Avenue, October 29, 1938. Carnegie Library, Courthouse, and Wareham Hotel in the background.



HOMECOMING FOOTBALL GAME

In College Stadium, October 29, 1938. Engineering Hall, Anderson Hall, and Kedzie Hall in the background.

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